User Manual

BBEdit™ 7.0

Professional HTML and Text Editor for the Macintosh

Bare Bones Software, Inc.

BBEdit™ 7.0.4

Product Design	*Rich Siegel, Patrick Woolsey, Jim Correia, Steve Kalkwarf*
Product Engineering	*Jim Correia, Jon Hueras, Steve Kalkwarf, Rich Siegel*
Engineers Emeritus	*Chris Borton, Tom Emerson, Pete Gontier, Jamie McCarthy, John Norstad, Jon Pugh, Mark Romano, Rob Vaterlaus*
Documentation	*Stephen Chernicoff, Caroline Rose, Jerry Kindall, John Gruber, Philip Borenstein, Simon Jester, Rich Siegel, Patrick Woolsey, Jeff Mattson*
Additional Engineering	*Polaschek Computing <http://www.polaschek-computing.com/>*
Packaging & Mac OS X Icon	*Ultra Maroon Design*
PCRE Library Package	*written by Philip Hazel and © 1997-2000 University of Cambridge, England*
PopupFuncs™ Technology	*Eric Slosser*
Installer VISE™	*courtesy of MindVision Software <http://www.mindvision.com/>*
Visibone color arrangements	*© 1999-2000 VisiBone <http://www.visibone.com/>*
SpellWright™ Spelling System	*© 1994 Lex-Tek International <http://www.lextek.com/>*

BBEdit and the BBEdit User's Guide are copyright ©1992-2003 Bare Bones Software, Inc. All rights reserved. Printed in USA.

Bare Bones Software, Inc.
P. O. Box 1048
Bedford, MA 01730–01048

(781) 687-0700
(781) 687-0711 fax

http://www.barebones.com/

Sales information: **sales@barebones.com**
Technical support: **support@barebones.com**

BBEdit is a trademark, and "It Doesn't Suck" is a registered trademark of Bare Bones Software.

Information in this document is subject to change without notice and does not represent a commitment on the part of the copyright holder. The software described in this document is furnished under a license agreement. This document may not, in whole or in part, be copied, photocopied, reproduced, translated, or reduced to any electronic medium or machine-readable form without prior consent, in writing, from the copyright holder.

Warranty and license information is printed on the CD-ROM package and included on the next page of this user manual.

Frontier is a trademark of UserLand Software. THINK C, THINK Pascal, and THINK Reference are trademarks of Symantec Corporation. CodeWarrior is a trademark of Metrowerks, Inc. Macintosh, Mac OS, Mac OS X, Power Macintosh, AppleScript, MPW and ToolServer are trademarks of Apple Computer, Inc. PowerPC is a trademark of International Business Machines Corp. All other trademarks are the property of their respective owners.

License Agreement:

You, the Licensee, assume responsibility for the selection of the program BBEdit to achieve your intended results, and for the installation, use, and results obtained from the program. Breaking the package seal and installing the program constitutes your acceptance of these terms and conditions. If you do not accept these terms and conditions, then do not break the package seal or install the software, and return the package for a full refund.

License:

You may use the program and documentation on a single machine and copy the program and documentation into any machine-readable or printed form for backup or support of your use of the program and documentation on the single machine, provided that no more than one copy of the program and documentation may be used on a single machine by no more than one user at a time. You may not use, copy, modify, or transfer the program or documentation, or any copy thereof, in whole or in part, except as provided in this Agreement. If you use, copy, modify, or transfer the program or documentation, or any copy thereof, in whole or part, except as expressly provided for in this agreement, your license is automatically terminated.

The license is effective on the date you accept this Agreement, and remains in effect until terminated as indicated above or until you terminate it. If the license is terminated for any reason, you agree to destroy the program and documentation, together with all copies thereof, in whole or in part, in any form, and to cease all use of the program and documentation.

Limited Warranty and Limitation of Remedies:

The program, documentation and any support from Bare Bones Software, Inc., are provided “as is” and without warranty, express and implied, including but not limited to any implied warranties of merchantability and fitness for a particular purpose. In no event will Bare Bones Software, Inc. be liable for any damages, including lost profits, lost savings, or other incidental or consequential damages, even if Bare Bones Software, Inc. is advised of the possibility of such damages, or for any claim by you or any third party.

General Terms:

This Agreement can only be modified by a written agreement signed by you and Bare Bones Software, Inc. and changes from the terms and conditions of this Agreement made in any other manner will be of no effect. If any portion of this Agreement shall be held invalid, illegal, or unenforceable, the validity, legality, and enforceability of the remainder of the Agreement shall not in any way be affected or impaired thereby. This Agreement shall be governed by the laws of The Commonwealth of Massachusetts, without giving effect to conflict of laws provisions thereof. As required by United States export regulations, you shall not permit export of the program or any direct products thereof to any country to which export is then controlled by the United States Office of Export Administration, unless you have that agency’s prior written approval.

Use, duplication and disclosure by the United States Government of the program or any part thereof is subject to restrictions as set forth in subdivision (g)(3) of Rights in Data - General Clause in Federal Acquisition Regulations (“FAR”) 52.227.14, the Commercial Computer Software Restricted Rights Clause in FAR 52.227.19. and/or subdivision c(1)(ii) of Rights in Technical Data and Computer Software Clause in Department of Defense FAR 252.227.7013.

Acknowledgment:

You acknowledge that you have read this agreement, understand it, and agree to be bound by its terms and conditions. You further agree that it is the complete and exclusive statement of the agreement between you and Bare Bones Software, Inc. which supersedes all proposals or prior agreements, oral or written, and all other communications between you and Bare Bones Software, Inc. relating to the subject matter of this agreement.

Contents

Chapter 1 Welcome to BBEdit 1

Getting Started 1
What Is BBEdit? 2
How Can I Use BBEdit? 2
Working with Development Environments – 2
Writing HTML Documents – 2
Human Interface Notes 3
Dynamic Menus – 3 • *Bypassing Options Dialogs* – 3
Keyboard Shortcuts for Commands – 3 • *Contextual Menus* – 4
Snappy Palettes – 4 • *Dialog Box Key Equivalents* – 4
Changes from Previous Versions 6
Info on New Features – 7
Support Services 8

Chapter 2 Installing BBEdit 9

Basic Installation 9
System Requirements – 9 • *Installing BBEdit* – 9
Updating an Existing Copy – 10
BBEdit Support Folder 11
Support Folder Setup for Non-Admin Users – 11
Glossary – 12 • *Help* – 12 • *HTML Templates* – 12
Language Modules – 12 • *MacPerl Support* – 13
Menu Scripts – 13 • *Plug-Ins* – 13 • *Scripts* – 14
Search Scripts – 14 • *Shutdown Items* – 14 • *Startup Items* – 14
Stationery – 14 • *Unix Support* – 15
Other BBEdit Files and Folders 16
BBEdit Preferences Folder – 16 • *BBEdit Prefs Data* – 16
BBEdit FTP Bookmarks – 16 • *Clipboards* – 16
File Filters – 16 • *BBEdit Grep Patterns* – 16
Recent Files & Favorites – 17 • *Recent Folders & Favorites* – 17
User Dictionary – 17

Chapter 3 **Working with Files** 19

Launching BBEdit 19
Startup Items – 20
Memory Considerations 20
Creating and Saving Documents 21
Saving a Copy of a File – 23 • *File Saving Options* – 23
Long File Names – 26 • *Saving with Authentication* – 26
Opening Existing Documents 26
Choosing the Encoding for a Document – 27
Using the Open Command – 28
Using the Open Hidden Command – 29
Using the Open Recent Command – 29
Using the Open Selection Command – 30
Invoking BBEdit from the Command Line 31
Opening from and Saving to FTP Servers 32
FTP Browsers 35
Using Stationery 35
Using File Groups 36
Creating a File Group – 36 • *Using File Groups* – 37
Removing Files from a File Group – 38
Making Backups 38
Automatic Backups – 39 • *Manual Backups* – 39
Printing 40
Options Available from the Print Dialog – 41
The Printing Options Command – 42

Chapter 4 **Editing Text with BBEdit** 45

Basic Editing 46
Moving Text – 46 • *Multiple Clipboards* – 47 • *Drag and Drop* – 48
Multiple Undo 48
Window Anatomy 48
The Status Bar – 48 • *The Function Pop-Up Menu* – 50
The Split Bar – 51
Cursor Movement and Text Selection 51
Clicking and Dragging – 51 • *Rectangular Selection* – 52
Arrow Keys – 52 • *Scrolling the View* – 53 • *The Delete Key* – 54
The Numeric Keypad – 54 • *Go To Line Command* – 55
Function Keys – 55
Text Options 56
Editing Options – 57 • *Display Options* – 58
Font & Tabs 60
Text Transformation 60
Balance – 60 • *Exchange Characters* – 61 • *Change Case* – 61
Shift Left and Shift Right – 62 • *Add Line Breaks* – 62
Remove Line Breaks – 62 • *Rewrap Quoted Text* – 62
Increase and Decrease Quote Level – 63 • *Strip Quotes* – 63
Hard Wrap – 63 • *Zap Gremlins* – 63 • *Entab* – 64
Detab – 65 • *Resolve URL* – 65
How BBEdit Wraps Text 65
Soft Wrapping – 66 • *Hard Wrapping* – 67

The Mark Submenu 69
Setting Markers – 70 • *Clearing Markers* – 70
Using Grep to Set Markers – 71
The Insert Submenu 71
Inserting Files – 71 • *Inserting a Folder Listing* – 72
Inserting Paths – 72 • *Inserting a Toolbox Call Template* – 72
Inserting a Page Break – 72
Comparing Text Files 73
Multi-File Compare Options – 75
Using the Spelling Checker 76
Checking Spelling – 76 • *Selecting Active Dictionaries* – 78
Editing the User Dictionary – 78
Using an External Spelling Checker – 79

Chapter 5 **Working with International Text** **81**

An International Text Primer 81
How Script Systems Work 82
Using Script Systems 83
Script Systems in BBEdit – 84
Unicode 85
Saving Unicode Files – 85 • *Opening Unicode Files* – 86

Chapter 6 **Working with Windows** **87**

Window Menu 87
Minimize Window – 87 • *Bring All to Front* – 88
Palettes – 88 • *Arrange* – 91 • *Get Info* – 92
Super Get Info – 92 • *Reveal in Finder* – 92 • *Zoom* – 93
Send to Back – 93 • *Exchange with Next* – 93
Synchro Scrolling – 93 • *Window Names* – 93

Chapter 7 **Searching** **95**

Basic Searching and Replacing 96
Search Settings – 97 • *Search Field Input Script* – 99
Special Characters – 99
Multi-File Searching 99
Multi-File Search Results: Batch Find – 101
Multi-File Search Results: File by File – 102
Specifying the Search Set – 103 • *Multi-File Search Options* – 106
File Filters – 107
Multi-File Replacing 109
Replacing in Files with Projector CKIDs – 110
Quick Search 111

Search Menu Reference 112
Find – 112 • *Quick Search* – 112 • *Find Again* – 112
Find Selection – 112 • *Enter Search/Replace String* – 112
Replace – 112 • *Replace All* – 113 • *Replace & Find Again* – 113
Find in Next File – 113 • *Open All Matches* – 113
Find & Replace All Matches – 113 • *Go to Line* – 113
Go to Center Line – 113 • *Go to Previous/Next Error* – 113
Go to Previous/Next Placeholder – 113 • *Find Differences* – 114
Apply to New – 114 • *Apply to Old* – 114 • *Compare Again* – 114
Find in Reference – 114 • *Find Definition* – 114

Chapter 8 **Searching with Grep** **115**

What Is Grep or Pattern Searching? 116
Recommended Books and Resources 116
Writing Search Patterns 117
Most Characters Match Themselves – 117
Escaping Special Characters – 117
Wildcards Match Types of Characters – 118
Character Classes Match Sets or Ranges of Characters – 120
Matching Non-Printing Characters – 121
Other Special Character Classes – 122
Quantifiers Repeat Subpatterns – 122
Combining Patterns to Make Complex Patterns – 123
Creating Subpatterns – 124 • *Using Alternation* – 125
The "Longest Match" Issue – 126
Non-Greedy Quantifiers – 126
Writing Replacement Patterns 127
Subpatterns Make Replacement Powerful – 127
Using the Entire Matched Pattern – 128
Using Parts of the Matched Pattern – 128
Case Transformations – 129
Examples 130
Matching Identifiers – 130 • *Matching White Space* – 130
Matching Delimited Strings – 131 • *Marking Structured Text* – 131
Marking a Mail Digest – 132 • *Rearranging Name Lists* – 132
Advanced Grep Topics 133
Matching Nulls – 133 • *Backreferences* – 133
POSIX-Style Character Classes – 135
Non-Capturing Parentheses – 135
Perl-Style Pattern Extensions – 136
Comments – 137 • *Pattern Modifiers* – 137
Positional Assertions – 139 • *Conditional Subpatterns* – 141
Once-Only Subpatterns – 142 • *Recursive Patterns* – 144

Chapter 9 **Browsers** **145**

Browser Overview 145
List Pane – 145 • *Status Bar* – 146 • *Text View Pane* – 146
Splitter – 146
Disk Browsers 146
Using Disk Browsers – 147
Using the List Pane in Disk Browsers – 148
Using the Text Pane in Disk Browsers – 148

Search Results Browsers 149
Error Results Browsers 150

Chapter 10 **Preferences** **151**

The Preferences Command 152
Application Preferences 153
Optional Mac OS Services – 153
Optional Application Services – 153
Show Full Paths in "Open Recent" Menu – 153
Remember Dialog Box Placement – 154
When Dragging, Show – 154
Verify Open Files After – 154
Remember the most recently used items – 154
Browser Display Preferences 154
Results Lists – 154 • *Show File Icons* – 154
Differences Preferences 155
Arrange Windows On – 155
Differences Window Placement – 155
Arrange Windows – 155
Multi-File Differences – 155
Editor Defaults Preferences 155
Auto-Indent – 155 • *Balance While Typing* – 156
Smart Quotes – 156 • *Auto-Expand Tabs* – 156
Show Invisibles – 156 • *Syntax Coloring* – 157
Soft Wrap Text – 157
File Filters Preferences 157
File Search Preferences 157
Find All Matching Files – 157 • *Skip (…) Folders* – 157
Follow Folder Aliases – 158 • *Default <…> Directory* – 158
Unix Search Paths – 158
File Types Preferences 159
Fonts Preferences 159
FTP Settings Preferences 160
Remember Passwords – 160
Store Passwords in Keychain – 160
Include Passwords in Proxy URL Drags – 160
List FTP Files on the "Open Recent" Menu – 161
Passive FTP – 161 • *Show Document Icons* – 161
Show Files Starting with "." – 161
FTP Bookmarks – 161
Function Popup Preferences 161
Show Includes – 161 • *Sort Items by Name* – 162
Show Function Prototypes – 162
Glossary Preferences 162
Ignore Trailing CR – 162 • *Glossary Is Language Sensitive* – 162
HTML Colors Preferences 162
Color Palette Layout – 162 • *Color Swatch Size* – 162
Color Picker – 163
HTML Markup Preferences 163
HTML Tags – 163 • *Quoting Tag Attributes* – 163
XML/HTML Markup Rules – 163 • *CSS Markup Formatting* – 163
Close Current Tag – 164

HTML Palette Preferences 164
Palette Width – 164 • *Button Height* – 164
Buttons on Main HTML Tools Palette – 164
HTML Preview Preferences 164
When Previewing Files with Unsaved Changes – 165
Web Browsers Available for Preview – 165
HTML Tools Preferences 165
HTML Updater – 165 • *Syntax Checker Warnings* – 165
Link Checker Warnings – 165
HTML Web Sites Preferences 166
Site Name – 167 • *Web Server Name* – 167
Site Path on Server – 167 • *Default Page Name* – 168
Local Site Root – 168 • *Look for Templates and Include Files In* – 168
Languages Preferences 168
Language for Untitled Windows – 169
Default Language – 169
Software Update Preferences 169
Spelling Preferences 169
Built-In – 169 • *Use Dictionaries* – 169 • *Word Services* – 170
Startup Preferences 170
Do Nothing – 170 • *New Text Document* – 170
New Disk Browser – 170 • *New FTP Browser* – 170
Open – 170 • *Open from FTP Server* – 170
State Preferences 171
Honor Saved State – 171 • *Default State for New Documents* – 171
Always Add State – 172
Status Bar Preferences 172
Show Status Bar – 172 • *Show Philip Bar* – 172
Show Tab Stops – 172 • *Show Line Numbers* – 172
Show Cursor Position – 172 • *Show Current Function* – 172
Function Popup – 172 • *Text Options* – 172
Markers – 173 • *File Options* – 173 • *Insert Menu* – 173
File Path – 173 • *Get Info Icon* – 173 • *Super Get Info Icon* – 173
Document Icon – 173 • *Show All/Hide All* – 173
Button Puffiness – 173
Text Colors Preferences 174
Text Editing Preferences 174
Enable Shift-Delete for Forward Delete – 174
Use Numeric Keypad for Cursor Movement – 174
Allow Single-Click Line Selection – 175
Double-Click to Balance – 175
Confirm Non-Undoable Editing Actions – 175
Use "Hard" Line Numbering in Soft-Wrapped Views – 175
Use Emacs Key Bindings – 175
Exchange Command and Option Key Behavior – 176
Extra Space in Text Views – 176 • *Allow Text Smoothing* – 176
Enable Unicode Input – 176
Text Encodings Preferences 176
Text Files: Opening Preferences 177
Translate Line Breaks – 177 • *If a File's Type Is Unknown* – 177
Link File's Encoding to HTML/XHTML Character Set – 178
If the File's Encoding Can't Be Guessed, use – 178
Warn of Malformed UTF-8 Files – 178

Text Files: Saving Preferences 179
Force New Line at End – 179 • *Default Line Breaks* – 179
Make Backups Before Saving – 179
Text Printing Preferences 179
Default for Page Setup – 179 • *Defaults for Printing* – 180
Default Font – 180 • *Use Document's Font* – 180
Fractional Widths – 180 • *Print Backwards* – 180
Frame Printing Area – 180 • *Print Page Headers* – 180
Print Full Pathname – 180 • *Print Line Numbers* – 180
Print Two-Up – 180 • *1-Inch Gutter* – 180
Print Color Syntax – 181 • *Time Stamp* – 181
Text Search Preferences 181
Report Single-File "Replace All" Results – 181
Remember Find Dialog's "Start At Top" Setting – 181
Color Grep Patterns in Find Dialog – 181
Multi-File Search/Replace – 181 • *Grep Patterns* – 181
Tools Preferences 182
Script Editor – 182 • *Coding Tools* – 182
Mac OS API Reference – 182 • *Default Shell* – 183
Install "bbedit" Tool – 183
Unix Scripting Preferences 183
Windows Preferences 183
Window Zooming – 183 • *Window Menu* – 184
Sort Windows By – 184 • *Window Stacking* – 184
Leave Room for Palettes – 184 • *Leave Room for Finder* – 184

Chapter 11 **BBEdit HTML Tools** **185**

Introduction to the HTML Tools 185
Recommended Books – 186 • *Recommended Online Resources* – 186
SGML Resources – 187 • *What You Need* – 187
Configuring the HTML Tools 187
Using the HTML Tools 188
Creating a New Document – 189 • *File Addressing* – 191
HTML Tool Descriptions 192
Tag Maker – 193 • *Edit Tag* – 194 • *Close Current Tag* – 195
Balance Tags – 195 • *Document Type* – 195 • *Character Set* – 195
CSS Submenu – 196 • *Body Properties* – 200 • *Head Elements* – 200
Block Elements – 201 • *Lists* – 203 • *Tables* – 203 • *Forms* – 204
Inline Elements – 206 • *Phrase Elements* – 209
Font Style Elements – 210 • *Frames* – 211 • *Check* – 211
Update – 212 • *Includes* – 214 • *Utilities* – 214 • *Misc* – 215
Preview – 216
The HTML Tools Palette 216
HTML Tools Palette Tips – 217 • *HTML Tools Palette* – 217
Other Palettes – 218
HTML Translation 220
Remove Tags – 220 • *Paragraphs* – 220 • *HTML Entities* – 220
Templates 220
Template Setup – 220 • *Using a Template* – 221
Custom Markup 221

Chapter 12 **Using the Glossary** **223**

The Glossary Command 223
Language Sensitivity of the Glossary 224
Manually Sorting the Glossary 224
Inserting Glossary Items 224
Assigning Key Equivalents to Glossary Items 225
Glossary Substitutions 226
Using OSA Scripts with the Glossary 227

Chapter 13 **Scripting BBEdit** **229**

AppleScript Overview 229
About Macintosh Scripting – 230
Scriptable Applications and Apple Events – 230
Recordable Applications – 231 • *Saving Scripts* – 231
Using Scripts with Applications – 232 • *Scripting Resources* – 232
BBEdit and AppleScript 234
Recording Scripts for BBEdit – 234
Reading an AppleScript Dictionary – 236
Sample Scripts – 240 • *AppleScript Pitfalls* – 240
Moving Scripts from Pre-6.0 Versions of BBEdit – 241
Working with Scripts 247
Scripts Menu – 247 • *Scripts Window* – 248
Organizing Scripts – 248 • *Attaching Scripts to Menu Items* – 248

Chapter 14 **Working with Development Tools** **251**

Configuring BBEdit for Development Environments 252
Syntax Coloring – 253
Working with Development Environments 253
Switching Between Source and Header Files – 253
BBEdit and the Unix Command Line 253
Shell Worksheets – 254
Invoking BBEdit from the Command Line – 256
Perl, Python, and Shell Scripting 256
Using MacPerl on Mac OS 9 – 256
Using Unix Scripts on Mac OS X – 257
Language Resources – 257
Line Endings and Perl/Unix Scripts – 258
MacPerl/Shebang Menu – 259 • *Filters and Scripts* – 261
Filters – 261 • *Scripts* – 262 • *Additional Notes* – 262
Working with CVS 263
Get Revision – 263 • *Update File* – 263 • *Update Folder* – 263
Commit File – 264 • *Commit Folder* – 264
Commit Parent Folder – 265 • *Find Lurkers* – 265
Compare Revisions – 266 • *Compare Arbitrary Revisions* – 266
Get Revision History – 266 • *Get CVS Status* – 266
Add – 266 • *Remove* – 266 • *Go to Previous/Next Conflict* – 267
Export Project – 267 • *Open Log File* – 267
Working with Metrowerks CodeWarrior 267
Using the CodeWarrior Menu – 267
Working with Project Builder 269

Working with Projector/SourceServer 269
Check In – 270 • *Check Out* – 271 • *Get Revision* – 272
Cancel Check-Out – 272 • *Edit Task Comment* – 272
Compare Revisions – 273 • *Get Revision History* – 273
New Project – 273 • *Check In Folder* – 274 • *Check Out Folder* – 275
Find Lurkers – 276 • *Make Obsolete* – 276
Remove Projector Info – 276 • *Open Log File* – 277

Chapter 15 **BBEdit Plug-Ins** **279**

Using BBEdit Plug-Ins 279
Installing Plug-Ins – 280
The Tools Menu and Floating Window – 280
The Set Key Button – 280
Supplied Plug-Ins 281
Add/Remove Line Numbers – 281 • *Configure TeX Coloring* – 281
Convert to ASCII – 281 • *Educate Quotes* – 282 • *Hex Dump* – 282
Prefix/Suffix Lines – 282 • *Process Duplicate Lines* – 283
Process Lines Containing – 284 • *Salary Adjust* – 285
Sort Lines – 285 • *Un/Comment* – 286
Obsolete Plug-Ins 286
Third-Party Plug-Ins 286
Finding More Plug-Ins – 286 • *Plug-In Compatibility* – 286
Mac OS X Plug-Ins – 287

Appendix A **Command Reference** **289**

Keyboard Shortcuts for Commands 289
Assigning Keys to Menu Commands 290
Available Key Combinations – 290
Listing by Menu and Command Name 291
Listing by Default Key Equivalents 298
. 301

Appendix B **Editing Shortcuts** **303**

Mouse Commands 303
Arrow and Delete Keys 304
Emacs Key Bindings 305
Using universal-argument – 306

Appendix C **Placeholders and Include Files** **307**

Placeholders 307
Using the #RELATIVE# Placeholder – 310
Include Files 311
Simple Includes – 311 • *Persistent Includes* – 311
Include Files with Variables – 312 • *Including AppleScripts* – 313
Including Perl or Python Scripts – 314 • *Other Include Notes* – 316

Appendix D **Changes Since 7.0** **317**

BBEdit 7.0.4 317
Close Current Tag – 317
BBEdit 7.0.3 318
Link File's Encoding to HTML/XHTML Character Set – 318
BBEdit 7.0.2 318
Expanded Character Set Handling – 318
Application Packaging Changes – 319
Mac OS 9.1 Support – 319 • *Insert Multiple Files* – 319
Save a Copy – 319 • *New Menu Key Combinations* – 319
CVS Export Project – 319
Unix Script Support for Include Files – 319
BBEdit 7.0.1 320

Index **321**

CHAPTER

1 Welcome to BBEdit

This chapter introduces you to BBEdit, a high-performance HTML and text editor for the Macintosh.

In this chapter

Getting Started **1**
What Is BBEdit? **2**
How Can I Use BBEdit? **2**
Working with Development Environments – 2
Writing HTML Documents – 2
Human Interface Notes **3**
Dynamic Menus – 3 • *Bypassing Options Dialogs* – 3
Keyboard Shortcuts for Commands – 3 • *Contextual Menus* – 4
Snappy Palettes – 4 • *Dialog Box Key Equivalents* – 4
Changes from Previous Versions **6**
Info on New Features – 7
Support Services **8**

Getting Started

Thank you for selecting BBEdit, the premier HTML and text editor for the Macintosh.

If you are new to BBEdit, we recommend that you read at least Chapters 1 through 4 of this manual to familiarize yourself with the installation and basic operation of BBEdit. You may also wish to read or preview any other chapters that cover features you frequently use. After you have installed BBEdit, the best way to learn it is to use it. Complete online assistance is available from the Help menu.

If you have used earlier versions of BBEdit, we recommend that you read at least Chapter 1 for an overview of significant changes in this version, and Chapter 2 for information relevant to installation and upgrading.

If you are have been using BBEdit 7.0, and want to see what's new in the latest update, please refer to Appendix D for an overview of recently added features.

What Is BBEdit?

BBEdit is a high-performance HTML and text editor. Unlike a word processor, which is designed for preparing printed pages, a text editor focuses on providing a means of producing and changing content. Thus, BBEdit does not offer fancy formatting capabilities, headers and footers, graphics tools, a thesaurus, and other staples of feature-laden "office" software. Instead, it focuses on helping you manipulate text in ways that word processors generally cannot.

In service of this goal, BBEdit offers powerful regular expression–based ("grep") search and replace, multi-file search, sophisticated text transformations, intelligent text coloring, and other features not usually found (or missed) in word processors.

BBEdit also has features that make it easier to edit specific kinds of text, such as source files for programming languages and HTML (Hypertext Markup Language) files for the World Wide Web. In fact, since the rise of the Web, BBEdit has become the tool of choice for Macintosh Web designers who need more flexibility than visual Web authoring tools can provide.

How Can I Use BBEdit?

Use BBEdit any time you need to create or edit Web pages, source files, or text documents of any kind. Whether you need to find (or change!) all the occurrences of some text in a set of files, or modify or reformat large text files of any sort, or quickly tweak a Web page, BBEdit is the right tool for the job.

Working with Development Environments

BBEdit found its initial following among the Macintosh programming community with its core development-oriented tools. Although we have added many features to BBEdit since its first incarnation, this source editing functionality is as strong now as ever. The Function pop-up menu can parse many programming languages to give you quick access to functions defined in your files. You can even integrate BBEdit with popular development environments, including CodeWarrior, MPW, Projector, and Perl (or any other Unix scripting language on Mac OS X). Chapter 14 provides more information on how to set up BBEdit for this type of work.

Writing HTML Documents

BBEdit is an ideal tool for preparing and editing HTML documents (web pages). In addition to many options for preparing text content, such as wrapping, case changes, and searching, BBEdit offers a powerful set of tools to make editing web pages easier. The Tag Maker command speeds the creation of HTML tags, while the Edit Tag option allows quick changes to existing markup, and the HTML Tools palette makes dragging and dropping tags simple or lets you access commands with just a click.

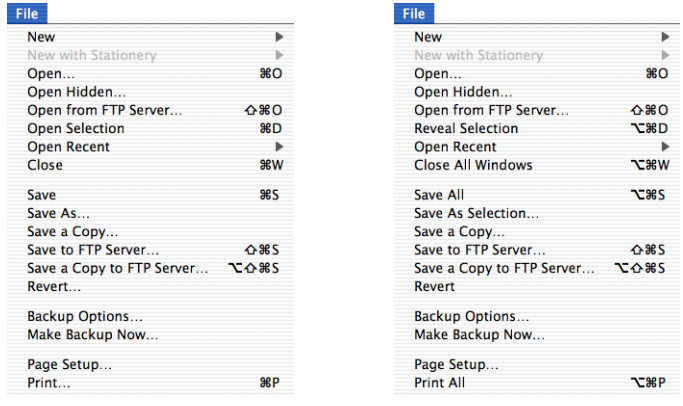
Using BBEdit, you can easily preview your work in most Macintosh Web browsers, including iCab, Internet Explorer, Netscape, Mozilla, OmniWeb, and Opera. For more information on using the HTML Tools to create, edit, and preview Web pages, see Chapter 11.

Human Interface Notes

BBEdit enhances the behavior of its menus and dialogs as described in this section.

Dynamic Menus

IMPORTANT Many of BBEdit's pull-down menus are dynamic: if you hold down the Shift or Option key while a menu is open, you can see some of the items change. The illustration below shows what the File menu looks like normally (left) and when you hold down the Option key (right).



You can use the Shift and Option keys when you choose an item from a menu or when you use the Command-key equivalents.

Bypassing Options Dialogs

You may have noticed that commands that require additional settings to be made before they are performed appear on the menu with ellipses after their names. To bypass this step and use the command with its most recent settings, hold down the Option key while selecting the menu item. For example, "Zap Gremlins…" in the Text menu becomes "Zap Gremlins" when the Option key is pressed and, when chosen, will zap gremlins in the frontmost text document using the current settings.

Keyboard Shortcuts for Commands

Many of BBEdit's commands have keyboard shortcuts. BBEdit lets you reassign the shortcuts for any menu item, glossary entry, plug-in, or Open Scripting Architecture (OSA) script to suit your own way of working. To change the keyboard shortcut for any menu item, choose the Set Menu Keys command (in the Edit menu on Mac OS 9, or in the BBEdit (Application) menu on Mac OS X).

Many other BBEdit features can have keyboard shortcuts assigned as well. Here's how to set them:

Feature	Set Keys in…
Menu commands	Set Menu Keys (BBEdit menu on Mac OS X, Edit menu on Mac OS 9)
Plug-ins	Plug-In Tools palette
Glossary items	Glossary palette
Scripts	Scripts palette
Perl/Unix filters and scripts	Perl/Unix Filters and Scripts palettes
Stationery	Stationery palette

To display any of BBEdit's floating palette windows, use the Palettes submenu in the Window menu.

Contextual Menus

When you Control-click on selected text or at the insertion point in a text window, BBEdit's contextual menu provides quick access to a few relevant and frequently used commands, so you do not have to hunt around in the menu bar for them.

Snappy Palettes

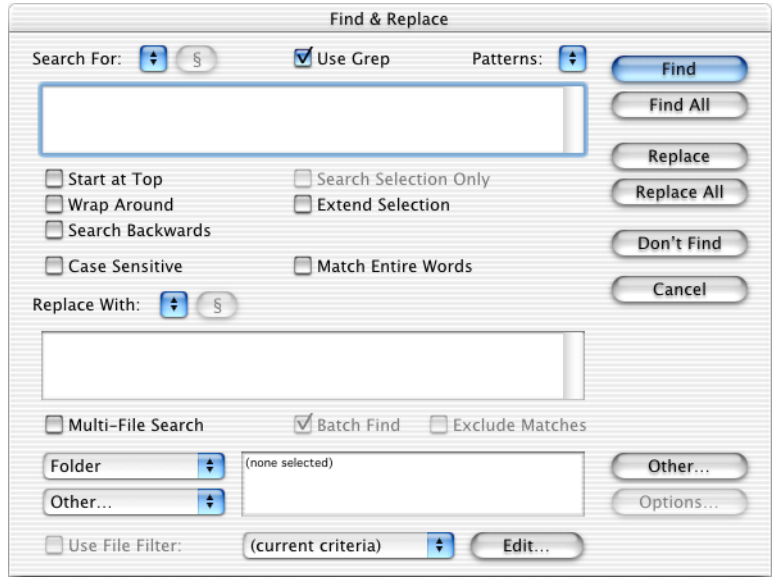
When you move or resize palettes (floating windows), they will "snap" to the edges of the screen and the edges of other palettes. You can override this behavior by holding down the Shift key while dragging or resizing.

Dialog Box Key Equivalents

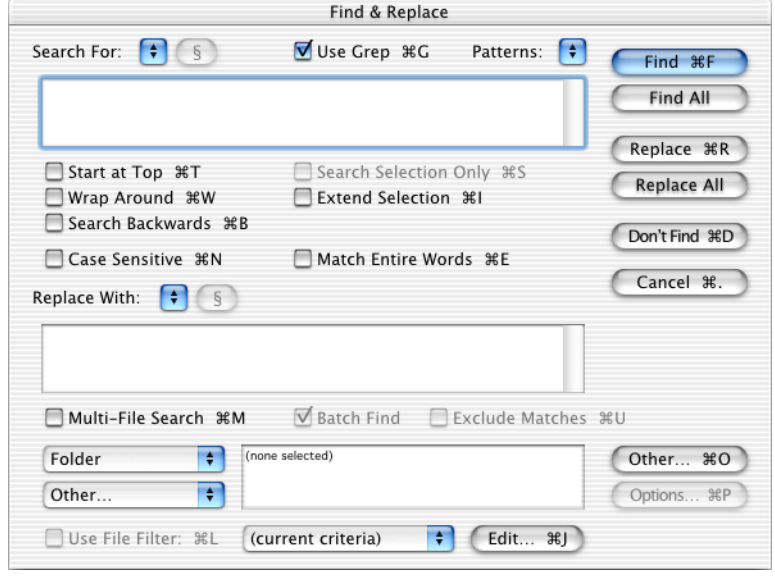
You can use keys to click buttons or select options in most of BBEdit's dialog boxes. Certain keys have the same meaning in all dialogs:

- Pressing either the Return or Enter key is the same as clicking the default button.
- Typing Command-period or pressing the Escape key is the same as clicking the Cancel button.
- You can use the Cut, Copy, Paste, Clear, and Select All commands (either from the Edit menu or with their Command-key equivalents) in any dialog that has a text field.

To see the other key equivalents for a particular dialog, hold down the Command key. After a brief delay, the key equivalents appear next to the buttons in the dialog. For example, this is the Find & Replace dialog without the Command-key equivalents showing:



This is the Find & Replace dialog with the Command-key equivalents visible:



BBEdit waits briefly before displaying the Command-key equivalents so that you can type a sequence quickly without making the dialog flicker.

Changes from Previous Versions

BBEdit 7.0 builds on the strengths of versions 6.0 and 6.5, and extends its reach even further into the realm of Mac OS X, while also bringing important new capabilities to users of both Mac OS 9 and Mac OS X. Major features and enhancements added in this version include:

- Integrated access to CVS allows you to transparently work with source files from multiple repositories. [Mac OS X]
- Menu-driven and key-bindable Glossary item selection makes inserting frequently used text even faster and easier.
- Easily configure multiple web sites via the HTML Web Site preferences and work with them via the HTML Tools.
- Close Current Tag command speeds and simplifies HTML tag creation and editing.
- Expanded character set handling capabilities. [introduced in BBEdit 7.0.2]
- Support for rectangular text selections, including copying/pasting and application of many text transformations.
- Completely redesigned Sort Lines and Process Duplicate Lines plug-ins offer grep pattern support for sorting, extracting, and handling text more flexibly than ever before. Bring on your log files!
- Enhanced syntax coloring now includes ASP/VBScript support and updates for recent PHP4 usage.
- XHTML 1.1 support in the HTML Tools and syntax checker.
- Editing views now offer Quartz text smoothing support. [Mac OS X]
- Insert File Contents command now allows selection & insertion of multiple files. [introduced in BBEdit 7.0.2]
- External editor support for use with Project Builder. [Mac OS X]
- “bbedit” command-line tool now offers go-to-line number support. [Mac OS X]
- Shell worksheet improvements include a current process indicator and allow interruption of the current process. [Mac OS X]
- Window resizing is now palette-savvy and a new "atop" stacking option is available.

Highlights of some key features added in BBEdit 6.x which BBEdit 7.0 also benefits from include:

- International text support that lets you edit documents in any left-to-right script system supported by your Macintosh, including multi-byte scripts such as Chinese and Japanese, using inline input. Additionally, BBEdit can read and write Unicode files.

- Enhanced scripting support that allows recording of commands and enables any BBEdit menu command to be replaced or augmented by a script. In other words, BBEdit is now recordable *and* attachable.
- Greatly improved regular expression matching, using the "PCRE" engine to bring new power and flexibility to BBEdit's search and replace capabilities, including the use of back-references within search patterns, "non-greedy" searching, and discrete match quantifiers.
- Integrated support for CSS (cascading style sheets): syntax coloring, function navigation, and markup support, including contextual markup via Tag Maker.
- Expanded contextual menu support, including access to the Tag Maker and Edit Tag commands for quickly adding or modifying HTML markup.
- Advanced multi-file search filters that let you choose precisely which files to search, based on partial file name, parent folder name, creator, type, creation date, last modification date, Projector status, and more.
- Enhanced FTP capabilities, including the use of alternate ports, allowing the use of third-party port reflectors and SSH tunnels for FTP, and FTP Browser windows, which present a persistent view of remote directories.
- Pervasive integration with Unix scripting systems: run Perl, Python, and Unix shell scripts and filters from within BBEdit. [Mac OS X]
- Authenticated saves: automatically prompts for administrator name and password when working with protected files. [Mac OS X]
- "bbedit" command-line tool: invoke BBEdit from anywhere in the Unix command line to open files, or use BBEdit as your default editor. [Mac OS X]

Info on New Features

In addition to the major enhancements described above, BBEdit 7.0 also contains a plethora of additional features and interface and performance enhancements, as well as bug fixes.

new in 7.0 Look for the "new in 7.0" marker in the margin throughout this manual to find features that have changed significantly or have been added since the last major version, BBEdit 6.5. (If you are viewing the PDF version of the manual, you can also search for this marker.)

new in 7.0.2 For an overview of features added in BBEdit 7.0.2, please refer to Appendix D of this manual, or look for the "new in 7.0.2" marker in the margin.

For a detailed summary of other changes and bug fixes added in maintenance versions, please refer to the release notes which are available on our web site.

`http://www.barebones.com/support/bbedit/current_notes.shtml`

Support Services

The Bare Bones Software web site provides up-to-date information on BBEdit, Mailsmith, and other Bare Bones Software products, including FAQs, product updates, plug-ins, sample scripts, and other support and informational materials.

```
http://www.barebones.com/
```

For support help and information, follow the links to the Support area, where you'll find a wide range of information including:

- Frequently Asked Questions (FAQ) — Information and answers for commonly encountered questions and problems. We strongly recommend you read the BBEdit FAQ before resorting to any other means of inquiry.
- Product Updates — The latest maintenance versions of our products will always be available for download.
- Technical Support — If you have a registered version of BBEdit or any other Bare Bones product, and you can't find the information you need on our web site, send email to <support@barebones.com>

CHAPTER

2 Installing BBEdit

This chapter tells you how to install BBEdit on your Macintosh. It also describes the files BBEdit creates, where it puts them, and how to install or remove optional components of BBEdit.

In this chapter

Basic Installation **9**
System Requirements – 9 • *Installing BBEdit* – 9
Updating an Existing Copy – 10
BBEdit Support Folder **11**
Support Folder Setup for Non-Admin Users – 11 • *Glossary* – 12
Help – 12 • *HTML Templates* – 12 • *Language Modules* – 12
MacPerl Support – 13 • *Menu Scripts* – 13 • *Plug-Ins* – 13
Scripts – 14 • *Search Scripts* – 14 • *Shutdown Items* – 14
Startup Items – 14 *Stationery* – 14 • *Unix Support* – 15
Other BBEdit Files and Folders **16**
BBEdit Preferences Folder – 16 • *BBEdit Prefs Data* – 16
BBEdit FTP Bookmarks – 16 • *Clipboards* – 16
File Filters – 16 • *BBEdit Grep Patterns* – 16
Recent Files & Favorites – 17 • *Recent Folders & Favorites* – 17
User Dictionary – 17

Basic Installation

BBEdit is supplied as a single application file that runs on both Mac OS 9 and Mac OS X. Specific system requirements and installation instructions are described below, and the organization of BBEdit's supporting files is described in subsequent sections.

System Requirements

IMPORTANT BBEdit 7.0.4 will run on Mac OS 9.1 or later (CarbonLib 1.5 or later required), but Mac OS 9.2.2 or later (with CarbonLib 1.5 or later) is strongly recommended.

If you are using Mac OS X, version 10.1.5 or later is required, and version 10.2.3 or later is strongly recommended.

Installing BBEdit

Depending on how you obtained BBEdit, you will receive either a CD-ROM or a disk image file (a ".dmg" file). To install BBEdit 7.0, just drag the "BBEdit 7.0" folder from the CD-ROM or disk image to the Applications folder, or other desired location, on your hard drive.

Additionally, you should verify that your Macintosh has the following software installed:

- If you are running Mac OS 9.1 or later, check that you have version 1.5 or later of CarbonLib installed in your system Extensions folder, or use Apple's Software Update control panel to obtain the latest version. You will need to reboot your computer after installing the new version.
- If you are running Mac OS X 10.1.5 or later, no updates to your system components are required.

The first time you run BBEdit 7.0, you will be prompted to enter the unique serial number that you received at the time of purchase, either on your product CD-ROM or with your email order invoice. Once you have entered the serial number, this dialog will no longer appear and you can use BBEdit freely.

If you have not yet purchased the product and thus do not have a serial number, you can dismiss the dialog by clicking the Demo button. BBEdit will then operate with full functionality for a limited period of time, after which you must purchase the product and receive a serial number in order to continue using it.

Note The BBEdit 7.0 application is installed as a "fat bundle" that can run on either Mac OS X or Mac OS 9. On Mac OS 9, the application file's name is BBEdit.app; on Mac OS X, the ".app" extension is hidden and the file name appears simply as BBEdit.

Updating an Existing Copy

IMPORTANT Beginning with the release of BBEdit 7.0.2, the factory-supplied plug-ins and spelling dictionaries are now part of the application package. In addition, keyboard equivalents for plug-ins are no longer tracked using the plug-in file as a mechanism. Thus, future updates to plug-ins will no longer require that you re-apply any customized key equivalents for plug-ins. (For this release, you will need to do so one last time.)

This also means that factory plug-ins and spelling dictionaries remain available when the application is launched without a "BBEdit Support" folder.

Updating from BBEdit 7.0.x

If you are updating from an earlier release of BBEdit 7.0, then you need only replace your existing BBEdit application file with the version supplied on the update disk image.

Upgrading from a Previous Version

IMPORTANT If you are upgrading from a version of BBEdit prior to 7.0, the easiest course of action is to copy the supplied "BBEdit 7.0" folder to your Applications folder (or other desired location). Then, you can move over any additional plug-ins or customized support files (such as scripts or glossary items) from your old BBEdit folder, before deleting it.

Please carefully read the next section, "BBEdit Support Folder," since the organization of supporting files has changed from older versions. We have provided specific suggestions and tips for transferring your custom support files with each category.

BBEdit Support Folder

This section describes the arrangement of BBEdit's support folder. This is the location that BBEdit scans when you launch it to locate a variety of items that add functionality such as plug-in tools, and more. All of these items are contained in the relevant subfolders (described below) within a folder named BBEdit Support. Although none of the items contained in the BBEdit Support folder are essential for doing basic tasks with BBEdit, and you can remove any or all of them, they provide additional functionality that you may wish to retain.

BBEdit will look for the BBEdit Support folder in the following locations:

- When running on Mac OS X, BBEdit will first look in the current user's Application Support folder for the BBEdit Support folder. If it is not found there, the application will look in its own folder for the BBEdit Support folder. (On Mac OS X, the path to this folder is "~/Library/Application Support", where ~ is the customary Unix shorthand to indicate the user's home directory.)
- When running on Mac OS 9, BBEdit will look for the BBEdit Support folder in its own folder.

To prevent alias loops, BBEdit will not follow aliases to folders that are placed inside any of the subfolders within the BBEdit Support folder. We also recommend that you do not try to share plug-ins or scripts between BBEdit and other applications, and that you not make aliases to plug-ins or scripts located on remote (server) volumes.

Note In some earlier versions of BBEdit, all of these support folders (some with slightly different names) were individually located in the same folder as the BBEdit application. Later versions gathered them together as subfolders within the single BBEdit Support folder, which was required to be present in the same folder with the BBEdit application; if BBEdit did not find such a folder at launch time, it would create an empty one automatically. The current version of BBEdit no longer requires the presence of a BBEdit Support folder, and will not create one automatically.

new in 7.0.2 The spelling dictionaries are now stored in the BBEdit application package and not in the BBEdit Support folder. That means you can check a document's spelling even when there's no BBEdit Support folder present.

Support Folder Setup for Non-Admin Users

Under Mac OS X, depending on where BBEdit's application folder is located, users who do not have admin privileges may not be able to modify the contents of the "BBEdit Support" folder. This means that in addition to being unable to add or modify scripts, stationery, and glossary items, such users will not be able to modify the key equivalents for any existing items.

To avoid this, a user with admin privileges should remove the "BBEdit Support" folder from the BBEdit application folder. Then, each individual user can create their own local BBEdit Support Folder:

~/Library/Application Support/BBEdit Support/

which they will be able to add or remove items from at will.

Glossary

The Glossary folder holds text files whose contents can be inserted into an editing window with the click of a button or a keystroke. Glossary files can also use special placeholders to insert varying or context-sensitive information—for example, a date or the name of the current file.

Initially, this folder contains several sample glossary sets (for C source code, HTML, WML, Mac OS X Property List files, and plain text), which you can use or modify as you like. See Chapter 12 for more information on the Glossary.

Upgrading If you are upgrading from a version of BBEdit prior to 6.5, you have two options for migrating your current custom Glossary items. You can either move all of your custom files into the Universal folder within the Glossary folder or create new Glossary sets for your existing files.

Help

BBEdit's online help content, including a complete PDF version of the user manual, is now contained within the application package, so there is no longer a separate Help folder. You can access help at any time while running BBEdit by choosing an item from the Help menu. In particular, choosing "BBEdit User Manual" will open the Acrobat PDF version of the user manual, instead of the Help Viewer.

HTML Templates

This folder contains HTML document templates for use with the New HTML Document command. A sample set of templates is provided, which you can modify or add to as you wish. Please see Chapter 11 for more information on BBEdit's HTML tools.

Upgrading You should move or copy over any customized template or include documents that you wish to preserve.

Language Modules

This folder contains plug-in modules that tell BBEdit about new programming, scripting, or markup languages so that it can colorize them appropriately and generate function pop-up menu listings for them. Three modules are supplied with the default installation—Python, Setext, and TeX. A list of additional modules from third-party developers is available on our web site.

IMPORTANT The factory-supplied language modules will run on both Mac OS X and Mac OS 9. Some third-party language modules may need to be updated to run on Mac OS X. Visit our web site for the latest information.

MacPerl Support

This folder contains the Perl Scripts and Perl Filters folders, which are used to build the MacPerl/Shebang (#!) menu and the floating Perl Scripts and Perl Filters palettes when running on Mac OS 9. (See "Unix Support," below, if you are running BBEdit on Mac OS X.) You can place scripts and filters within subfolders (up to four levels deep) of their respective folders to organize them. Some example Perl scripts and filters are also supplied with the standard installation. The Perl Output file stores output from Perl, and the Perl Logs folder stores output logs for specific source files. See Chapter 14 for more information on this folder.

Upgrading You can move or copy over any Perl scripts or filters that you wish. (Note that BBEdit 6.1 looked for a single folder named Perl Support that was used on both Mac OS 9 and Mac OS X but this is no longer the case in current versions; Perl scripts and filters must now be placed in the Unix Support folder for use on Mac OS X. See Chapter 14, "Working with Development Tools," for more details.)

Menu Scripts

This folder contains scripts that are attached to BBEdit menu items. See Chapter 13 for more information on creating and using menu scripts.

Plug-Ins

The Plug-Ins folder contains third-party code modules that add features to BBEdit. Each plug-in adds a command to BBEdit's Tools menu and you can run the plug-in by choosing its name from that menu.

new in 7.0.2 Note that the factory-supplied plug-ins are contained within the application itself. That means you can use them even if no BBEdit Support folder is available.

To install a plug-in, drag and drop it directly onto the BBEdit application icon in the Finder. BBEdit is launched, if necessary, and presents an alert asking you to confirm that you want to install the plug-in. If there is already a plug-in with the same name in your Plug-Ins folder, you will be further prompted whether to replace it with the version you are dragging. If you confirm the operation, the plug-in you dragged will be placed at the top level of your Plug-Ins folder and the one it replaced will be moved to the Trash. You will need to quit and relaunch the BBEdit application in order to use the newly installed plug-in.

Various plug-ins and information are available from our web site, as well as the BBEdit Plug-In SDK if you are interested in writing your own BBEdit plug-ins.

Upgrading If you have any third-party plug-ins that you wish to use with BBEdit 7.0 on Mac OS 9, you may move or copy them into the Plug-Ins folder.

IMPORTANT **You should *not* copy any of the factory-supplied plug-ins from previous versions of BBEdit, including those provided with BBEdit 6.5, to use with BBEdit 7.0.**

You will also *not* be able to use any third-party plug-ins that have not been updated to function on Mac OS X. Contact the developers of your plug-ins or visit the Bare Bones Software web site for more information on the availability of updated plug-ins.

Scripts

The Scripts folder contains compiled OSA scripts that appear in the Scripts menu (left). (Most OSA scripts are AppleScripts.) You can place scripts in this folder and use the Scripts menu to run the script. Scripts may be placed within subfolders (up to four levels deep) to organize them. A floating Scripts palette lets you activate scripts with a double-click and assign keyboard shortcuts to any script. Several basic scripts are supplied in this folder, and more examples are available on the BBEdit CD.

Upgrading Some scripts written for use with versions of BBEdit prior to 6.0 will *not* work with BBEdit 7.0. Please see Chapter 13 for more details and tips on converting your existing scripts.

Search Scripts

The Search Scripts folder contains any compiled OSA scripts you prepare that return a list of files. These scripts are listed in a pop-up menu in the Find & Replace dialog, if a multi-file search using a Script target is selected. Please see Chapter 7 or a general scripting reference guide for more information on how to prepare such scripts. This folder is installed empty by default.

Shutdown Items

The items in this folder are opened when you quit BBEdit. Usually, this function will be used to run scripts of some sort. This folder is installed empty by default.

Startup Items

When launched, BBEdit will look for a folder named Startup Items in the BBEdit Support folder. If this folder is found, BBEdit will open any items it finds in the folder. This folder is installed empty by default.

If the items present are documents of a type that BBEdit knows how to handle (such as text files or file groups), BBEdit will open them directly. If you place a compiled OSA (AppleScript, or any other OSA-compliant scripting language) script in this folder, BBEdit will execute the script. If you place a folder alias here, BBEdit will open a disk browser window based at that folder.

If you place other types of items in this folder, BBEdit will ask the Finder to open them. If you often edit HTML files, for instance, you may want to place an alias to your Web browser (or your visual HTML editor) in the BBEdit Startup Items folder so that it will start up automatically whenever you run BBEdit.

Upgrading You can copy or move any file or application aliases from the Startup Items folder of your previous version of BBEdit. If you have any OSA scripts in this folder, please see the preceding upgrade note for the Scripts folder about script version compatibility.

Stationery

This folder contains stationery files for use with BBEdit's Stationery List feature, which can be selected from the Palettes submenu in the Window menu. Stationery files may be placed within subfolders (up to four levels deep) to organize them. When you want to create a new file, you can choose one of the files in the Stationery List as its basis. The contents of the stationery file will be copied into a new document window, but this window will be untitled and must be given a name and saved.

Unix Support

This folder contains the Unix Scripts and Unix Filters folders, which are used to build the Shebang menu and the floating Unix Scripts and Unix Filters palettes when running on Mac OS X. These folders are analogous to those in the MacPerl Support folder, except that on Mac OS X BBEdit supports *any* Unix scripting language, including Perl, Python, and shell scripts. You can place scripts and filters within subfolders (up to four levels deep) of their respective folders to organize them. Some example Perl, Python, and shell scripts and filters are supplied with the standard installation. The Unix Script Output file stores output from scripts, and the Unix Script Logs folder stores output logs for specific source files. See Chapter 14, "Working with Development Tools," for more information on this folder.

Upgrading You can move or copy over any Perl scripts or filters that you wish from previous versions of BBEdit. See Chapter 14, "Working with Development Tools," for information on how to share Perl scripts and filters between Mac OS 9 and Mac OS X.

Other BBEdit Files and Folders

When you start up BBEdit, it may create the files and folders noted in this section.

BBEdit Preferences Folder

BBEdit stores various settings files in a folder named BBEdit Preferences, which can be located either in the BBEdit Support folder or in the Preferences folder of your System folder. The settings in the BBEdit Support folder have precedence, although if neither is found, BBEdit will create a set of default preferences in your system Preferences folder.

Note On Mac OS X, the default location for the BBEdit Preferences folder is in the Preferences folder in the Library folder in the current user's home folder. Settings located in the BBEdit Support folder have precedence.

BBEdit Prefs Data

Basic preference settings are stored in a file named BBEdit Prefs Data in the BBEdit Preferences folder.

Upgrading BBEdit 7.0 will not import preference settings from versions of BBEdit prior to BBEdit 6.0. If you are upgrading to BBEdit 7.0 from BBEdit 5.1 or earlier, you will need to reset any preferences for which you do not want to use the factory default value.

BBEdit FTP Bookmarks

BBEdit stores user-defined FTP bookmarks in this file, which is located in your active BBEdit Preferences folder. (In some previous versions of BBEdit, these bookmarks were stored in the Prefs file.)

Upgrading If you wish to convert FTP bookmarks from BBEdit 5.x, you can do so in the FTP Settings panel of the BBEdit Preferences window.

Clipboards

BBEdit stores the last-used clipboard contents (for each of its multiple clipboards) in this file upon quitting.

Note If you lock the Clipboards file (by selecting it in the Finder, doing Get Info, and setting the Lock option), BBEdit will not preserve clipboard contents across runs.

File Filters

BBEdit stores user-defined file filter patterns in this file, which is located in your active BBEdit Preferences folder.

BBEdit Grep Patterns

BBEdit stores user-defined search patterns in this text file, which is located in your active BBEdit Preferences folder.

Upgrading If you have added any custom grep patterns to a previous version of BBEdit, you can replace the default file created by BBEdit with your customized version. Also, if you use a substantial number of custom patterns, we recommend that you maintain a backup copy of this file.

Recent Files & Favorites

This folder contains aliases to the most recent local files that you have opened, or FTP clippings for any files opened from FTP servers. The items stored in this folder are used to create the Open Recent list in BBEdit's File menu or in the Find Differences file lists.

To set the number of items shown in the Open Recent list, use the "Remember the most recently used items" option on the Application panel of the Preferences window.

Note You may lock items in this folder to have them persist as Favorites. To do this, open the Recent File & Favorites folder and use the Finder's Get Info command to open an info window for each item (alias) you wish to lock; then turn on the Locked option. Locked items will be displayed at the bottom of the list below a separator line, and are not counted against the specified item limit.

Recent Folders & Favorites

This folder contains aliases to folders that have recently been searched, or compared in a Find Differences operation. The items stored in this folder are used to create the folder search pop-up menu in the Find & Replace dialog or in the Find Differences folder lists.

To set the number of items shown in these lists, use the "Remember the most recently used items" option on the Application panel of the Preferences window.

Note You may lock items in this folder to have them persist as Favorites. To do this, open the Recent Folder & Favorites folder, and use the Finder's Get Info command to open an info window for each item (alias) you wish to lock; then turn on the Locked option. Locked items will be displayed at the bottom of the list below a separator line, and are not counted against the specified item limit.

User Dictionary

This special text file contains words which you have chosen to add while using BBEdit's spelling checker. See "Using the Spelling Checker" on page 76 for details on how to work with the User Dictionary.

CHAPTER

3 Working with Files

This chapter discusses how to use BBEdit to manipulate text files.

In this chapter

Launching BBEdit **19**
Startup Items – 20
Memory Considerations **20**
Creating and Saving Documents **21**
Saving a Copy of a File – 23 • *File Saving Options* – 23
Long File Names – 26 • *Saving with Authentication* – 26
Opening Existing Documents **26**
Choosing the Encoding for a Document – 27
Using the Open Command – 28
Using the Open Hidden Command – 29
Using the Open Recent Command – 29
Using the Open Selection Command – 30
Invoking BBEdit from the Command Line **31**
Opening from and Saving to FTP Servers **32**
FTP Browsers **35**
Using Stationery **35**
Using File Groups **36**
Creating a File Group – 36 • *Using File Groups* – 37
Removing Files from a File Group – 38
Making Backups **38**
Automatic Backups – 39 • *Manual Backups* – 39
Printing **40**
Options Available from the Print Dialog – 41
The Printing Options Command – 42

Launching BBEdit

To launch BBEdit, double-click the BBEdit application icon or a BBEdit document. Holding down the following keys at launch has the indicated effects, overriding any options set in the Startup panel of the Preferences window. When one of these keys is held down, BBEdit will beep after it finishes launching.

Modifier	Function
Option	Suppress startup items only
Shift	Disable all plug-ins, tools, external services, and startup items

Startup Items

When launched, BBEdit will look for a folder named Startup Items in the BBEdit Support folder. If this folder is found, BBEdit will open any items it finds in the folder.

If the items present are documents of a type that BBEdit knows how to handle (such as text files or file groups), BBEdit will open them directly. If you place a compiled OSA (AppleScript, or any other OSA-compliant scripting language) script in this folder, BBEdit will execute the script. If you place a folder alias here, BBEdit will open a disk browser window based at that folder.

If you place other types of items in this folder, BBEdit will ask the Finder to open them. If you often edit HTML files, for instance, you may want to place an alias to your Web browser (or your visual HTML editor) in the BBEdit Startup Items folder so that it will start up automatically whenever you run BBEdit.

If you wish, you may place the actual Startup Items folder in any convenient location, create an alias to it, and place the resulting alias in the BBEdit Support folder. Be sure to name the alias "Startup Items" so that BBEdit can locate it.

Memory Considerations

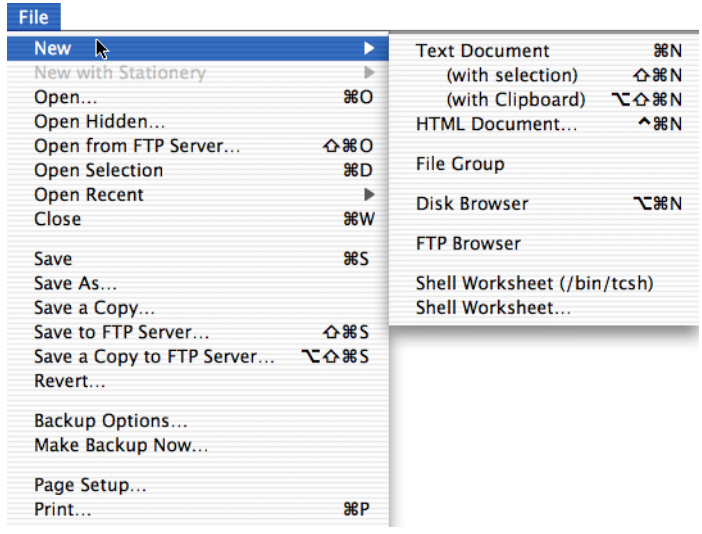
On Mac OS 9, BBEdit uses system memory (often referred to as "temporary memory") for documents and for most editing operations, so that you can open large files without having to increase BBEdit's memory partition. If you have a large document open, you may not be able to launch other applications until you close it.

You should generally increase BBEdit's memory partition only if you use third-party plug-ins that require more memory to load. These operations all use memory in BBEdit's application partition. A good starting point would be to add 500K to BBEdit's Preferred memory size; ordinarily, you should never need to add more than 1000K.

Note Mac OS X deals with memory very differently than do previous versions of the Mac OS. On Mac OS X, you no longer need to set memory partitions on a per-application basis.

Creating and Saving Documents

To create a new document window within BBEdit, pull down the File menu and open the New submenu. Since BBEdit allows creating several kinds of documents, you will see several options, as follows:



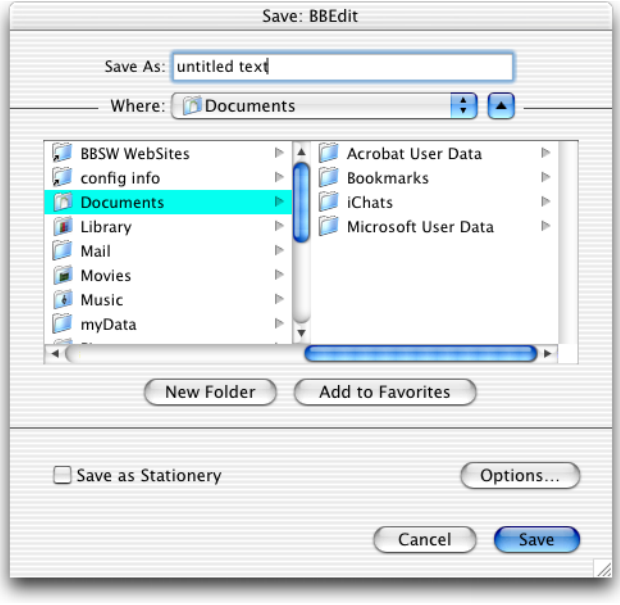
The document types and their effects are as follows:

- Text Document: Opens an empty text window.
- (with selection): Opens a new text window containing any text selected in the active document and having the same display font, saving you the trouble of copying and pasting it.
- (with Clipboard): Opens a new text window and automatically pastes the contents of the current clipboard into it.
- HTML Document: Brings up a dialog with options for creating a new HTML document (see Chapter 11 for more information on working with HTML documents).
- File Group: Opens a new file group (see "Using File Groups" later in this chapter for more information).
- Disk Browser: Opens a new disk browser (see Chapter 9 for more information).
- FTP Browser: Opens a new FTP browser (see later in this chapter for more information).
- Shell Worksheet [Mac OS X]: Opens a new shell worksheet using your default shell (as set in the Tools panel of the Preferences window).
- Shell Worksheet… [Mac OS X]: Opens a dialog listing all the Unix shells installed on your system; choose from the list, and a new shell worksheet will be opened using that shell.

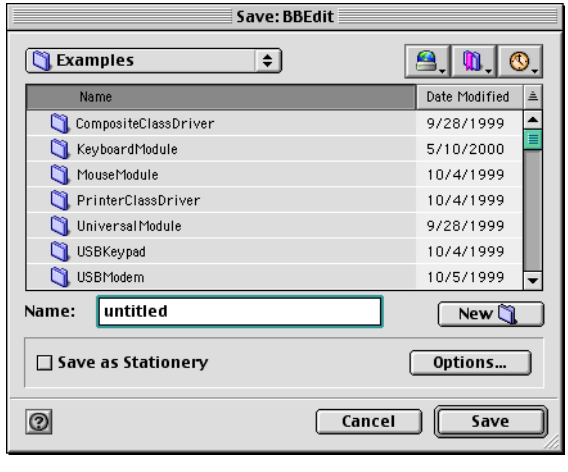
When you want to save the new document you have created:

1 **Choose the Save or Save As command from the File menu.**

BBEdit opens the Save dialog. On Mac OS X:



On Mac OS 9:



2 **Give the file a name.**

3 **Change any desired options (see below).**

4 **Click Save to save the file.**

You can also create a new document from the selected text in any open window with BBEdit's contextual menu. Simply Control-click the selected text and choose New (with selection) or Save Selection from the menu that appears. Depending on which command you choose BBEdit will either create a new editing window containing the selected text, or display the Save dialog and allow you to create a new file containing the selected text. The new file will use the same options (see "File Saving Options," below) as those of the original parent document.

If you want to save a copy of a file using the currently selected text as the file name, hold down the Option key and choose Save As Selection from the File menu. BBEdit displays the Save dialog with the selected text already entered as the file's name.

Saving a Copy of a File

new in 7.0.2

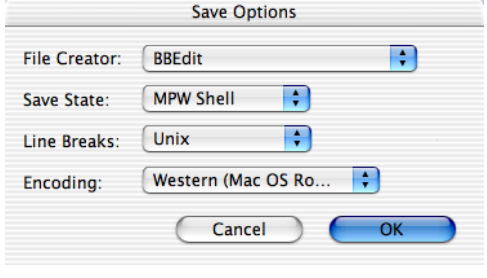
You can save a copy of a file with BBEdit's Save a Copy command in the File menu. Just like the Save As command, the Save a Copy command displays a Save dialog and lets you choose a name and location for the file. However, unlike the Save As command, where BBEdit will start working with the new file you saved in place of the original, when you use Save a Copy, you create a new file in the designated location, but keep working with the original file.

For example, say you are editing a document called Test.c and use the Save a Copy command to save a document called Backup-Test.c. The next time you choose the Save command, BBEdit saves the changes to Test.c and not to Backup-Test.c.

File Saving Options

BBEdit's Save dialog is the standard Macintosh Save dialog with these additions:

- Save As Stationery: When this option is selected, BBEdit saves the document as a stationery pad. When you later open this document, BBEdit uses it as the basis of a new untitled document. The new document will inherit the contents and display settings of the stationery document, but BBEdit will prompt you for a name when you save it.
- Options button: This button opens a dialog box that lets you control what file creator to use, how much state information is saved with the file, and what kind of line breaks and file type to use.



Setting the File Creator

The file creator is the information stored with a file that tells the Finder which application created the file. The default creator is naturally BBEdit, but you can choose other types from this pop-up menu.

Note If you save a file with a file creator other than BBEdit, double-clicking the file will launch the application that matches that file creator. If you do not have that application installed, you might get an error message. You can still open the file in BBEdit by dragging it onto the BBEdit application icon, or by using BBEdit's Open command.

You can add additional file types and set the default for this pop-up menu with the File Types panel of the Preferences window.

Saving State Information

The state information that BBEdit can save with a file includes the placement of the window, the scroll bar position, the font and size of the text, and so on. BBEdit stores either MPW state information or BBEdit state information. The following table shows what information is saved:

Information	MPW State	BBEdit State
Window position and size	•	•
Font & Tab	•	•
Scroll bar setting	•	•
Current selection range	•	•
Rectangular selection		•
Printing options		•
Text display options		•
Manual language selection		•
Character set encoding		•

You can choose which state information to save from the Save State pop-up menu in the Save Options dialog. The default state is MPW.

Setting the Line Breaks

The line breaks settings let you choose what kinds of line breaks BBEdit writes when you save the file. Choose:

- Macintosh line breaks (ASCII 13) if you are using the file only on a Macintosh or will be sending it to another Macintosh user.
- Unix line breaks (ASCII 10) if the file resides on a Unix file server or if you will be sending it to someone who uses a Unix system.
- DOS line breaks (ASCII 13/10) if the file resides on a DOS or Windows file server or if you will be sending it to someone who uses a DOS or Windows system.

Note On Mac OS 9, almost all applications expect or require files formatted with Macintosh line breaks. However, many of the Unix tools supplied with Mac OS X require files to be formatted with Unix line breaks.

Setting the Encoding

new in 7.0.2 BBEdit lets you save documents that use character set encodings other than Mac Roman, even multi-byte character sets. Chapter 5 contains more information on handling Unicode files and character set encodings with BBEdit.

In addition to the standard character set encodings, BBEdit also lets you save the files in a variety of plain Unicode formats:

- UTF-8
- UTF-8, no BOM
- UTF-16
- UTF-16, no BOM
- UTF-16, byte-swapped
- UTF-16, byte-swapped, no BOM

Note Anyone preparing HTML files in UTF-8 format may want to save them without the BOM, due to a bug in Microsoft Internet Explorer for the Macintosh. This may be addressed in a future version of Internet Explorer.

Here are details about what each of the above options means:

- UTF-8: UTF-8 encoding is a more compact variant of Unicode that uses 8-bit tokens where possible to encode frequently used sequences from the file.
- UTF-16: UTF-16 encoding always uses 16-bit tokens.
- no BOM: When saving Unicode files, you should always include a byte-order mark (BOM) so that the reading application knows what byte order the file's data is in. For maximum compatibility, the BOM should be used whenever possible. Use one of the "no BOM" options only if there is a specific reason to do so, such as providing compatibility with software that malfunctions when a BOM is present.
- byte-swapped: Since UTF-16 uses two bytes to represent each character, this leaves the question of which of the two bytes comes first—whether it is "little-endian" or "big-endian." By default, BBEdit writes UTF-16 big-endian (the standard). However, by choosing the appropriate option, you can write little-endian files instead, which some Windows software requires.

When you use an encoding that requires a Unicode file format, you can also choose "Unicode" as an option from the Line Breaks pop-up menu in this dialog. (Unicode has its own line-ending standard.)

Files saved as Unicode from BBEdit are given a type of 'utxt'—the standard for Unicode text files on the Mac. UTF-8 files are given a type of 'TEXT' for compatibility with other applications; however, BBEdit will also recognize such files with type 'UTF8'.

Note You can choose which encodings appear in the Encoding pop-up menu in the Text Encodings panel of the Preferences window.

Long File Names

When running on Mac OS X (and only on Mac OS X), BBEdit supports the use of "long" and Unicode file names. Such file names can be up to 255 characters long when stored on disks formatted as HFS Plus.

Mac OS 9 will accept and preserve files with long names, but you cannot create names longer than 31 characters, and longer names that are preserved will appear truncated in most applications (including the Finder). For example, a file named "This file has a name that is 47 characters long" will appear in Mac OS 9 as "This file has a name that#19958".

When running on Mac OS 9, BBEdit can open files with long names and will preserve the full name when saving, but it will display the truncated name in most places.

Saving with Authentication

On Mac OS X, BBEdit supports saving files that require Administrator privileges, if you possess the necessary user and password information to enable this. For example, you can edit and save files that are owned by "root". Authenticated saving is particularly useful in conjunction with BBEdit's Open Hidden command, which allows you to see and open files in hidden folders (like /bin and /usr).

When you open a file for which you do not have write privileges, BBEdit will display a slash through the pencil icon in the status bar. To edit the file, click the pencil icon. BBEdit will prompt you to confirm whether you wish to unlock the file. (Option-click the pencil icon to skip the confirmation dialog.)

When you are finished editing, simply choose Save from the File menu. BBEdit will prompt you to authenticate as a user with Administrator privileges. Type your "short" username and password to save the file.

Opening Existing Documents

There are several ways to open existing documents with BBEdit.

- Double-click any file with a BBEdit document icon.
- If BBEdit is running, choose the Open, Open Hidden, or Open Recent command from the File menu.
- Select the name of a file in a BBEdit editing window; then use the Open Selection command in the File menu.
- Double-click a file name in a browser's file list. (See Chapter 9, "Browsers.")
- Drag a file's icon to the Windows floating window. (See Chapter 6, "Working with Windows.")
- Drag a file's icon to the BBEdit icon or to an alias of the icon.

Note There is a bug in the Mac OS 9 Finder that can cause drag and drop not to work if you try to drop icons onto an alias of BBEdit. This behavior is usually triggered by moving BBEdit to another disk or rebuilding your desktop. If this happens, throw away your alias to BBEdit and make a new one.

BBEdit can natively open files with type 'TEXT', 'utxt', 'UTF8', or 'PICT'. (Of course, you cannot edit PICT files in BBEdit, but it will display them.)

If you have QuickTime installed, you can play movie files by opening them with BBEdit. You can also have BBEdit ask QuickTime to try to open non-text files (by selecting the appropriate setting in the Application panel of the Preferences window). BBEdit can then open image files and sounds in their own windows, rather than displaying them as text. If this preference is not active, BBEdit will open the files in their "raw" condition as if they were text documents.

Choosing the Encoding for a Document

new in 7.0.2 When opening documents, BBEdit will automatically recognize and appropriately handle files that use character set encodings other than Mac Roman, even multi-byte character sets. BBEdit examines the file for any indication of the proper encoding. If it finds none and you opened the file with the Open command, it uses the encoding specified in the Read As pop-up menu on the Open dialog. Otherwise, it uses the encoding specified in the "If the file's encoding can't be guessed, use" pop-up menu in the Text Files: Opening panel of the Preferences window.

Note You can choose which encodings appear in both the Read As and the "If the file's encoding can't be guessed, use" pop-up menus by using the Text Encodings panel of the preferences.

Here are the details of the steps that BBEdit goes through to determine the proper encoding for a file:

1. **If the file is well-formed HTML or XML, BBEdit looks for an "encoding=" or <meta charset=> directive that contains an character set supported by Mac OS X.**
2. **If the file contains a BBEdit state resource, BBEdit uses the encoding stored in the state resource.**
3. **If the file contains a UTF-8 or UTF-16 (Unicode) byte-order mark, BBEdit opens it as that type of Unicode file.**
4. **If the file has a resource that contains font information (such as a 'styl' resource, MPW state resource, or BBEdit state resource) and that resource specifies a multi-byte font, BBEdit opens the file as a Unicode file.**
5. **If you are opening the file with the Open command, BBEdit uses the encoding specified Read As pop-up menu on the Open dialog.**
6. **Finally, it uses the encoding specified by the "If the file's encoding can't be guessed, use" pop-up menu on the Text Files: Opening panel of the Preferences window.**

To change the encoding for a file after opening it, open the File pop-up menu on the window's status bar and use the Encoding submenu.

Note If an encoding change results in the conversion of a document's contents from a single-byte script to a multi-byte script, BBEdit will mark the document as being "dirty" or changed.

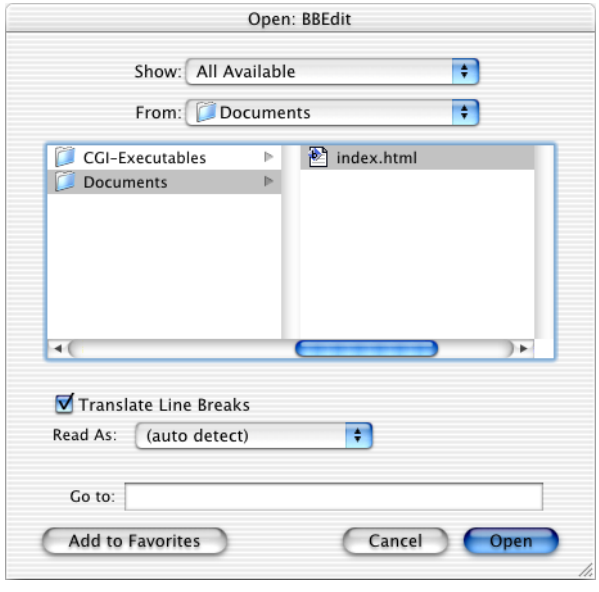
Using the Open Command

To open a file with the Open command:

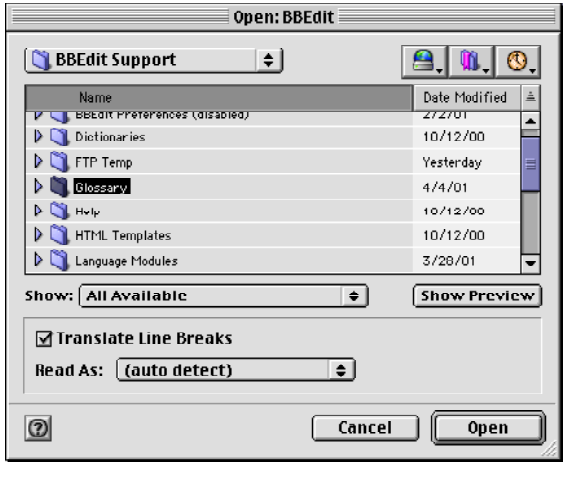
1 **Choose Open from the File menu.**

BBEdit displays the Open dialog box.

On Mac OS X:



On Mac OS 9:



1 **Select the file you want to open.**

When using BBEdit on Mac OS X, you can select (or deselect) multiple files by holding down the Command key or the Shift key as you click the files.

2 **Change any desired options (see below).**

3 **Click Open to open the file.**

You can use the options described below when you open a file.

Show (or File Types) Pop-Up Menu

This pop-up menu lets you choose what kinds of files can be selected from the Open dialog. If you know a file contains text, but it does not appear in the Open dialog, this means that the Macintosh type of the file is not set to 'TEXT'. This is sometimes the case with files received from other computers or downloaded from the Internet. Choose "All Files" from the File Types pop-up menu to open the data fork of any file as a text file.

IMPORTANT Given that Mac OS X does not set the file type of any text file created by a Unix program to a useful value, you may find it helpful to turn on the Map the File Name option in the Text Files: Opening panel of the Preferences window. With this preference turned on, BBEdit will inspect the file's name to see if it can determine whether the file is text or not. BBEdit will first attempt to map the file name to the list of suffix-to-language mappings specified in the Languages preferences. If a file name matches up with a language (even if the language is "None"), the file is assumed to be a text file. Thus, you can use BBEdit's own suffix mappings to convince it to recognize as text any files whose suffixes are not in Mac OS X's built-in list of file-suffix-to-file-type mappings. If no match is found in the Languages preferences, BBEdit will next apply the Internet Config file name mappings. (See Chapter 10, "Preferences," for more details.

Translate Line Breaks

When this option is selected, BBEdit translates DOS or Unix line breaks when opening a file. Otherwise, BBEdit leaves the original line breaks untranslated.

The setting of this option is not preserved between uses of the Open command, unlike the other options in the Open dialog. Generally, you will want to change this option only temporarily, e.g. to read in a particular file. To change the default setting of this option, use the Translate Line Breaks option from the Text Files: Opening panel of the Preferences window.

Read As

When opening a file, you can tell BBEdit what encoding it uses. Usually, BBEdit will correctly auto-detect the encoding, but if it does not, you can close the file and try again, manually specifying the desired format. Chapter 5 includes more information on encodings.

Using the Open Hidden Command

The Open Hidden command in the File menu presents a dialog with the same appearance and behaviors as the standard Open dialog, except that it shows invisible files (including, on Mac OS X, files whose names begin with a period.)

Using the Open Recent Command

The Open Recent hierarchical submenu contains a list of files you have opened recently. To open one of these files, choose it from the Open Recent submenu.

To set the number of items in the Open Recent list, use the "Remember the most recently used items" option on the Application panel of the preferences window.

Using the Open Selection Command

The Open Selection command lets you open a file that is referenced in the text of a document. It is particularly useful for opening include files or any document referenced by another file.

To open a file whose name is referenced in the text of a document:

1. **Select the file name within the body of the document.**
2. **Choose Open Selection from the File menu.**

   If a suffix of the form ".x" follows the name, BBEdit will automatically expand the selection to include the suffix.

BBEdit also understands the Unix-style line number specifications that can be appended to a file name. This type of specification is generated frequently by Unix command-line tools. For example, selecting the text "main.cp:210" and choosing Open Selection will open the file "main.cp" and automatically select line 210. If the file is already open, this command will simply select the designated line.

In searching for the requested file, BBEdit will look in the following locations, in order:

- If the selected file name is surrounded by angle brackets, BBEdit will start its search in the folder that you have specified under "Default <…> Directory" in the File Search preference panel.

new in 7.0

- If the Open Selection is being done from a shell worksheet, BBEdit will search the shell's current working directory, followed by any subdirectories within it.
- Otherwise, BBEdit will look first in the same folder as the file containing the selected file name, and then in any subfolders within that folder.
- If the file containing the selection is contained within one of the web sites defined in the HTML Web Sites preference panel, BBEdit will next search the "Templates & Includes" and site root folders, if any, associated with that site, followed by those for the default site designated in the preference panel.
- If the CodeWarrior IDE is running and a project is open, BBEdit will ask the IDE for the search paths to the current project's current target, and look for files in those folders as well.
- If BBEdit cannot find the file in any of these places, it will display a Choose Folder dialog to allow you to locate the file manually.

In some cases, there may be more than one file with the same name in the various folders BBEdit looks in. Normally, BBEdit opens the first one it encounters, and then stops. If you want BBEdit to find all files that match the selected name, be sure to select the Find All Matching Files option in the File Search preferences panel.

Open File by Name

If there is no selection, or there is no text display view in the front window, Open Selection becomes Open File by Name. Choosing this command brings up a dialog in which you can specify a file name or an exact path; BBEdit will open it as described above for Open Selection. As with Open Selection, you can specify an optional line number and can enclose the file name in angle brackets to limit the search to the default directory specified in the File Search preference panel.

Note When specifying a file in the Open File by Name dialog on Mac OS X, you can use the shorthand "~user/" notation to refer to an arbitrary user's home directory; for example, "~siegel/Documents/bigfile.c".

If you select the Match Wildcards checkbox in the Open File by Name dialog, you can use the following wildcards in the file name:

Wildcard	Meaning
?	Any single character
*	Any number of characters
#	Any numeric character
\	Escapes one of the above; for example, \? enters a question mark. To enter a literal backslash, use \\.

Invoking BBEdit from the Command Line

When running on Mac OS X, you can use the "bbedit" command-line tool to open files in BBEdit via the Unix command line. The first time you run BBEdit after installation, it offers to install the "bbedit" tool for you. If you choose not to do so, you can use the "Install 'bbedit' Tool" button in the Tools preference panel to install the tool at a later time.

To open a file in BBEdit from the command line, type

```
bbedit filename
```

where *filename* is the name of the file to be opened. To launch BBEdit without opening a file (or activate it, if it is already running), type

```
bbedit -l
```

You can also pipe `stdin` to the "bbedit" tool, and it will open in a new untitled window in BBEdit: for example,

```
ls -la | bbedit
```

If you just type

```
bbedit
```

with no parameters, the tool will accept `stdin` from the terminal; type Control-D (end-of-file) to terminate and send it to BBEdit.

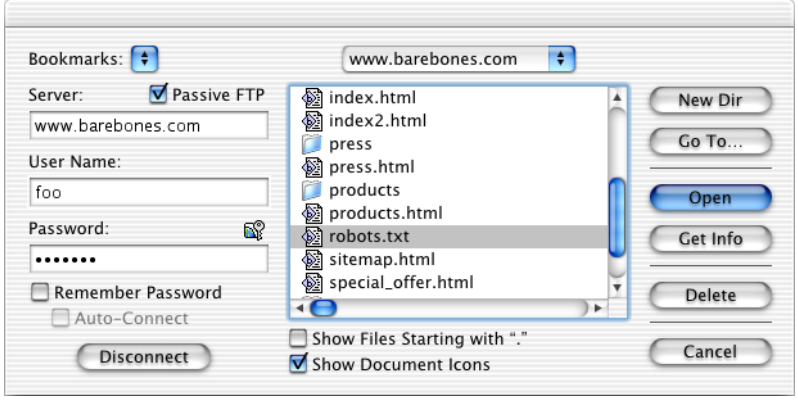
The complete command-line syntax for the “bbedit” tool is

```
bbedit [ -bcehlpuvVw ] [ -e <encoding_name> ]
       [ +<n> ] [ file ... ]
```

See the tool’s man page for a complete description of the available switches and options.

Opening from and Saving to FTP Servers

BBEdit can open files directly from, and save them to, any available FTP server. To open a file, choose Open from FTP Server from the File menu. The following dialog appears:



Enter the name of the server and specify your user name and password in the appropriate fields; then click the Connect button to initiate an FTP transaction. You can also click the Go To button to bring up a dialog in which you can type the exact pathname of a directory to view.

Note BBEdit allows you to open an FTP connection on ports other than the default (port 21). To specify an alternate port, place it on the end of the host name, separated by a colon—for example, ftp.example.com:1111.

Alternatively, you can choose an item from the Bookmarks pop-up menu to fill in a predefined server, user name, and password. Bookmarks can be set by entering the appropriate information in the FTP dialog and choosing Add from the Bookmarks pop-up menu, or by using the bookmark list in the FTP Settings preference panel.

To store FTP passwords, BBEdit takes advantage of Apple’s Keychain Manager, which is a standard component of both Mac OS 9 and Mac OS X.

WARNING As a security measure, we do not recommend saving FTP passwords without using Keychain support. If you prefer to store such information without relying on the Keychain, you should consider using the bookmark facility of a stand-alone FTP client, or a secure information storage application such as PGP or Web Confidential.

In the Open from FTP Server dialog, the Remember Password option applies *only* to the last FTP session that was initiated before dismissing the FTP dialog. The Auto-Connect option depends on this switch, so if Remember Password is turned off or disabled, Auto-Connect will be disabled.

As long as the Keychain is unlocked, whenever you enter a server and user name pair for which there is a record, the corresponding password will be filled in automatically. This will happen regardless of whether the Remember Password option in the dialog is on or off. If the Keychain is locked, the Remember Password option will also be disabled, and you will need to retype your password every time you use the FTP dialog. You can click the key icon in the FTP dialog (above the Password field) to unlock the Keychain, or to query it for a password if the Keychain is already unlocked.

The Passive FTP checkbox tells BBEdit to open a connection to the FTP server in passive mode, in which the server will send BBEdit the number of the port to use for the session. If this option is turned off, BBEdit will specify the port number. We recommend using passive mode when possible; however, not all servers or networks support it, so if you encounter difficulties, try turning this checkbox off.

The checkbox labeled Show Files Starting with "." tells BBEdit whether to display hidden or admin files in the chosen directory, such as .login, .forward, and .signature. Starting a file name with a period is a Unix convention, to make it invisible in most directory listings.

Once the connection is made, you can use the Open button and the directory pop-up menu to navigate through the directories, just as you would navigate through the folders on your hard drive. Click Delete to remove the file from the server.

You can use the Get Info button to reveal the size, modification date, and if applicable, file system permissions of the selected file. You can edit the file's name and click the Rename button to rename the file on the server; you can also make changes to the permissions and click the Set button to change them. (Take care not to set the permissions such that the file becomes inaccessible to you!)

BBEdit also supports FTP URL clippings. You can make a clipping of the FTP URL for a file, add the clipping to a file group, and double-click it, and BBEdit will open the specified file for editing. If the clipping contains the FTP URL for a directory, BBEdit will open a new FTP Browser window (see the next section for more information about FTP Browsers). Alternatively, you can double-click an FTP clipping in a disk browser, or drop one on BBEdit's icon in the Finder, with the same results as just described.

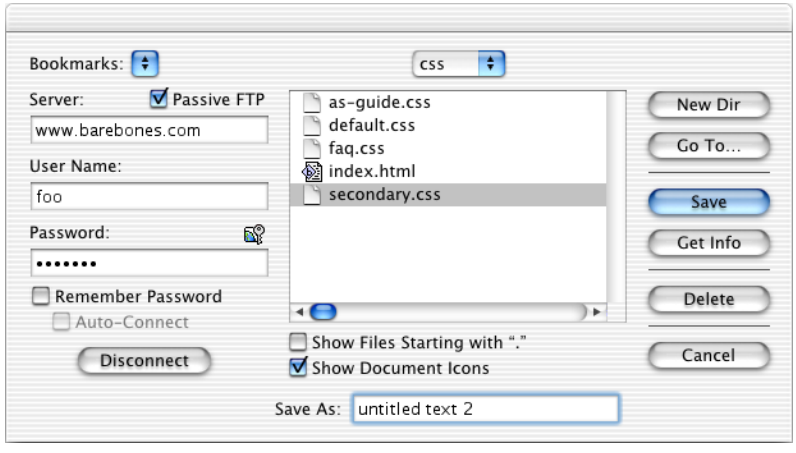
Dragging the window proxy icon from an editing window corresponding to a file opened from an FTP server will create a clipping containing that file's URL.

Once you have selected a file and opened it, BBEdit displays the file in a text editing window. The status bar displays the URL of the FTP file, not the pathname of the file on your hard drive as it does for local files.

The window path pop-up menu in editing windows for files opened via FTP displays the file's path on the FTP server, rather than the local path to the temporary file. Choosing one of the items from the pop-up menu will open a new FTP Browser window to the chosen directory.

Note When you open a file from an FTP server, BBEdit downloads it "raw" (in binary mode) and then performs a standard line ending conversion on the downloaded file.

After you have edited a file opened from an FTP server, pressing Command-S or choosing Save from the File menu saves the new version back to the FTP server. If you want to save the file in a different directory or under another name, choose Save to FTP Server to open a dialog (shown below) that works much like the Open from FTP Server dialog. Like a standard Save dialog for saving a local file, it includes a field for the name of the file so that you can name it before saving.

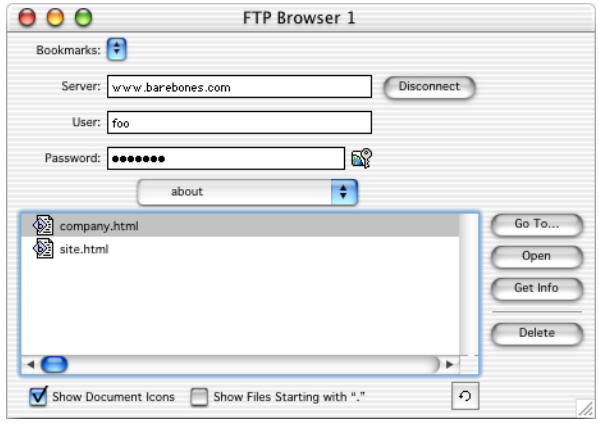


Note When you save a file to an FTP server using either Save or Save to FTP Server, and the file has Unix (LF) or Windows (CR+LF) line endings, BBEdit uploads the file in binary mode, preserving its line endings exactly as they are on your local machine. However, if the file has Macintosh (CR) line endings, it is uploaded in text mode so that the server can convert the line endings as appropriate.

Finally, you can use Save a Copy to FTP Server to upload a copy of your current file to an FTP server while keeping your local file open. This is especially useful when you maintain web site content on your local hard drive and only need to upload changes made in one or two files to the server.

FTP Browsers

BBEdit now offers FTP Browser windows. To open an FTP Browser, choose New FTP Browser from the New submenu of the File menu.



FTP Browsers enable you to maintain an open connection to an FTP server. Enter your server address, user name, and password, or choose a bookmark from the Bookmarks menu. The buttons and pop-up menus work the same as those in the Save to FTP Server and Open from FTP Server dialogs. To open a file, double-click it or select it and click the Open button. For editing purposes, files opened from an FTP Browser behave exactly like those opened with the Open from FTP Server command. To refresh the contents of the listing, click the button in the lower right with the circular arrow icon.

You can double-click a folder to change directories. If you hold down the Option key when opening a folder, it will open in a new FTP Browser window. You can select a range of files and directories by Shift-clicking, and you can select (and deselect) multiple items one at a time by Command-clicking.

Using Stationery

Like most Macintosh applications, BBEdit supports stationery pads. A stationery pad is a template document that, when opened, results in a new, untitled document with the content from the stationery file. In other words, you do not edit the stationery document itself; you use it as a starting point for a new document.

To create a stationery pad, click the Save As Stationery checkbox when saving the file from BBEdit. Alternatively, you can change any document into a stationery pad in the Finder by clicking the Stationery Pad checkbox in the document's Get Info window.

You can create new documents from a stationery pad in any of these ways:

- Open the pad the same way you would open any other document.
- Choose New With Stationery from the File menu, and select the desired stationery pad from the contents of the Stationery folder (inside the BBEdit Support folder).

- Use BBEdit's Stationery List, which is available from the Window menu. The Stationery List is a floating window that displays all the stationery pads you have placed inside the Stationery folder in the BBEdit Support folder. You can create a new document from any of these pads by double-clicking them in this list.

To assign a keyboard shortcut to a stationery pad, select the pad in the Stationery List window; then, click the Set Key button, type the desired key in the Set Key dialog and click OK.

Manually Sorting the Stationery

By default, items in the Stationery List are displayed in alphabetical order. However, you can force them to appear in any desired order by including any two characters followed by a right parenthesis at the beginning of their names. For example, "00)Web template" would sort before "01)HTML Template". For such files, the first three characters are not displayed in BBEdit. You can also insert a divider by including an empty folder whose name ends with the string "-***". (The folder can be named anything, so it sorts where you want it.) These naming conventions are the same as those used by the utilities FinderPop and OtherMenu.

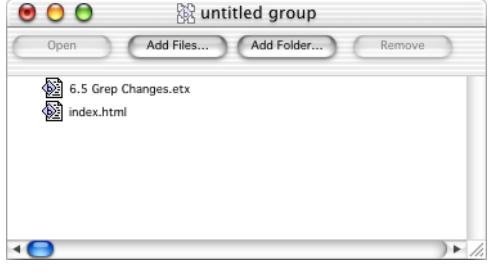
Using File Groups

If you frequently work with many related files, you may want to create a file group for them. A file group is a special kind of BBEdit file that contains references to other files and folders. These files will usually be BBEdit text files, but you can place any kind of file in a file group, including aliases to a file and URL clippings.

File groups are persistent. Once you have created one, you can save it to disk using the Save command, and then open it in a later BBEdit session to have instant access to the same set of files.

Creating a File Group

To create a new file group, pull down the File menu and choose File Group from the New submenu. A new file group window appears.



To add files to a file group, drag them from the Finder into the file group window, or click the Add Files button. When you click the Add Files button, BBEdit presents the Open dialog so that you can choose multiple files to be added at once. You can also add a file by dragging its icon from the status bar to the group window, or by dragging a file entry from a search results window.

In addition to file and folder references, BBEdit supports URLs in file groups. You can drag a URL (text or clipping file) to a file group window, and the URL will be saved in the group. If you subsequently open the item, BBEdit will hand off the URL to designated helper, or open it directly if it is an FTP URL.

To add folders to a file group, drag them from the Finder into the file group window, or click the Add Folder button. BBEdit displays the following dialog:

You can click Choose to choose a folder using an Open dialog, or just drag the desired folder to the white area from the Finder. You can add both folders and files, just files, or just folders, and you can choose to also add all nested folders and, optionally, to skip folders whose names are enclosed in parentheses.

When adding a folder to a file group with the Add button, you can choose whether to add all of the folder's contents. By choosing *not* to add a folder's contents, you can create a file group that consists only of folders, which can be handy for navigating and searching project roots without worrying about keeping in sync with the folders' contents.

Once you have added items to a file group, you can save it to disk for later use.

Using File Groups

To open a item in a file group, double-click it, or select it and click the Open button. If the item is a BBEdit document, BBEdit opens it. If it is a folder, it is opened in a disk browser. If it is an FTP URL clipping, BBEdit will open the remote file (or open an FTP Browser if the clipping points to a directory). Otherwise, BBEdit tells the Finder to open the file.

Note When opening a file group converted from BBEdit 5.x format, BBEdit will mark the file group document "dirty" (in need of saving) and alert you to this. You will thus be prompted to save the file group when closing it even if you have not made changes to it.

If you added nested folders, they appear in the file group with disclosure triangles, as in a Finder list view. Click the triangle to reveal the files and folders inside that folder.

You can use a file group as the basis of a multi-file search. See Chapter 7, "Searching," for more information.

Items in file groups display the Projector status of the individual file just to the left of the file's icon.

Removing Files from a File Group

To remove a file from a file group, drag it from the file group into the Trash in the Finder, or select the items you want to remove and click the Remove button.

Note Removing an item from a file group, even by dragging it to the Trash, does not delete the original file—only its entry in the file group.

Making Backups

BBEdit can automatically make a backup copy of a document before saving it. You can also manually take a snapshot of a document at any time to make it easier to revert to previous versions.

Note Starting with version 6.0, BBEdit uses a new format for its backup preferences that is not readable by any previous version. If you open a document containing old backup preferences, they will be converted into the new format immediately upon opening.

BBEdit names backup files with the same name as the original file and appends the date and a sequence number. For example, the first backup made on August 10, 1996 of "My Text File" would be named "My Text File (8-10-96)-1". The name of the original may be shortened if the date and sequence number would make the name of the backup file longer than 31 characters.

Note Versions of BBEdit prior to 6.1 named backup files with dates separated by "/" (for example, "My Text File (8/10/96)-1"). This has been changed to avoid conflicts with Unix file naming conventions.

The Text Files: Saving panel of the Preferences window includes an option that allows you to specify the default backup options for new files and for files that do not have state information. (See Chapter 10 for more details.) You can override this default on a file-by-file basis, or manually back up a file at any time.

A document must be saved and named before you can set its backup options or make a backup manually.

Note If the file being backed up contains Projector version-control information, this information is removed from the copy.

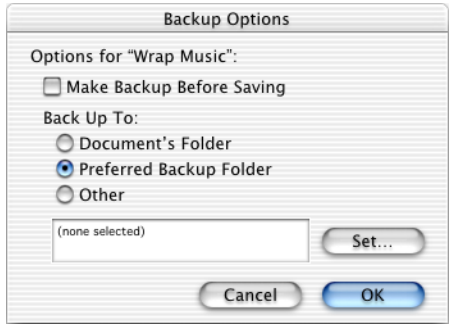
new in 7.0 If an error occurs during the backup process, BBEdit will now report a descriptive error, rather than just an OS result code. (The usual cause of such an error is that the defined backup directory has been deleted.)

Automatic Backups

To make automatic backups of a document, follow these steps:

1 **Choose the Backup Options command from the File menu.**

BBEdit opens the Backup Options dialog box.



2 **Specify the folder in which you want BBEdit to save the backups.**

You can choose the document folder, the preferred backup folder (set in BBEdit's preferences), or some other folder. In the latter case, click Set or drag a folder icon from the Finder to the path box.

3 **Select the Make Backup Before Saving option.**

BBEdit will make a backup before you save the file. The backup will contain the previously saved version of the file.

4 **Click OK.**

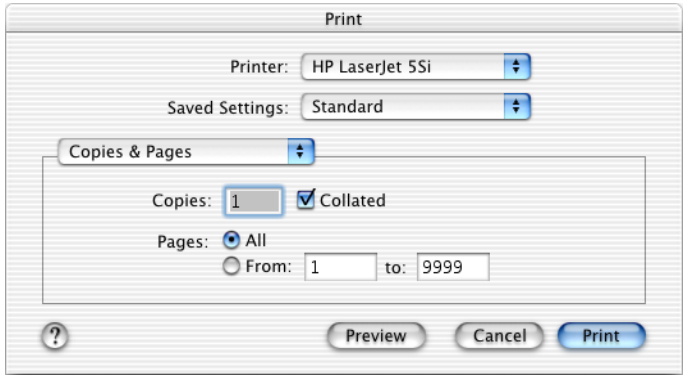
Manual Backups

To make backups manually, follow the same steps as above, but do not select the Make Backup Before Saving option. To make a backup at any point, choose the Make Backup Now command from the File menu.

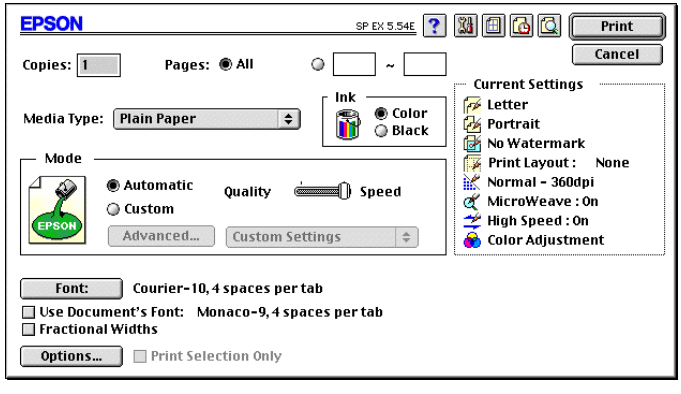
BBEdit opens a standard directory dialog box so that you can change the location and the name of the backup file. The default folder is the folder you specified in the Backup Options dialog box, and the default name is the standard backup name as described at the beginning of this section.

Printing

To print a document, choose the Print command from the File menu. BBEdit opens the standard system print dialog box for your currently selected printer.



If you are using Mac OS 9, the print dialog might look like this:

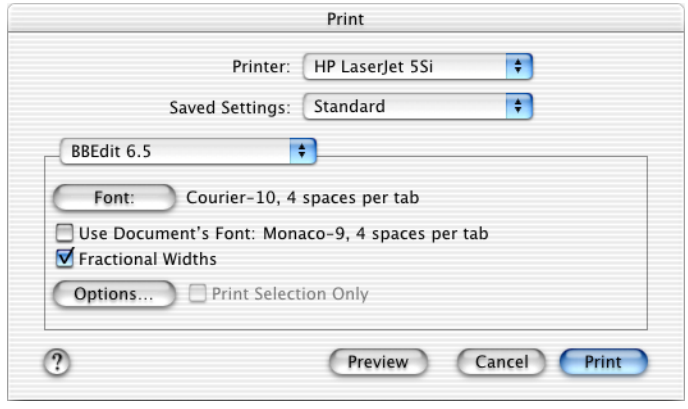


Note that the exact appearance and layout of options in the print dialog will vary depending on what printer you are using. With current versions of the LaserWriter driver or in the Mac OS X print dialog, for instance, the BBEdit-specific printing options are on a "page" of their own, where they can be selected by a pop-up menu at the top of the dialog. The resulting dialog is shown on the following page.

Note You set the default settings for most printing options in the Printing section of the Preferences window.

To print one copy of the active document without opening the print dialog box, choose the Print One Copy command from the File menu.

.



Options Available from the Print Dialog

You can set the following options from the print dialog box.

Font Button

Click this button to open a dialog box that lets you set the font, size, style, and tab settings to use while printing.

Use Document's Font

When this option is selected, BBEdit uses the document's font when printing.

Fractional Widths

When this option is selected, BBEdit prints proportionally-spaced fonts with better letter spacing. This option works only on PostScript printers.

Options Button

Click this button to open the Printing Options dialog box. See "The Printing Options Command" below.

Print Selection Only

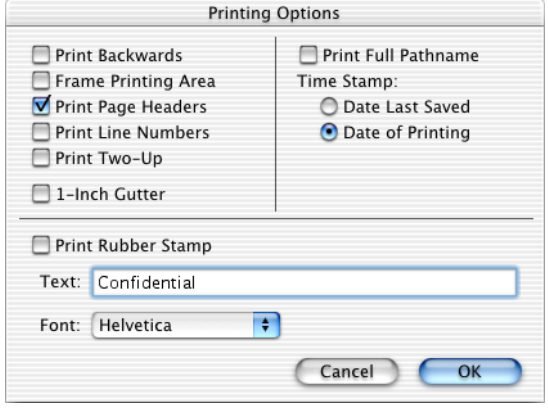
When this option is selected, BBEdit prints only the selected text.

The Printing Options Command

The Printing Options command in the Edit menu lets you further specify how BBEdit prints your documents. You can set the defaults for most of these options in the Printing panel of the Preferences window.

Note When creating a new document, or when opening a text document that does not have BBEdit saved state (or with the Printing Settings option turned off in the State preferences), BBEdit will obtain print options for the document from the preferences, just before printing. Thus, for these types of documents, you can use the Printing preferences to control behavior globally, instead of having to change print settings on a per-document basis. Note that if you change the options in the print dialog, the document settings will be divorced from the preferences.

You can also open the Printing Options dialog box by using the Options button in the main print dialog box.



Print Backwards

When this option is selected, BBEdit prints documents last page first. This option is useful if you are printing to a printer that does not arrange pages in the proper order.

Frame Printing Area

When this option is selected, BBEdit draws a frame around the printed text.

Print Page Headers

When this option is selected, BBEdit prints the page number, the name of the file, and the time and date printed in a header at the top of each page.

Print Line Numbers

When this option is selected, BBEdit prints line numbers along the left edge of the paper.

Print Two-Up

When this option is selected, BBEdit prints two pages on one sheet of paper. Use this option to save paper.

1-Inch Gutter

When this option is selected, BBEdit leaves a one-inch margin along the left edge of the paper. Use this option if you usually put your pages in three-ring binders.

Print Full Pathname

When this option is selected, BBEdit prints the full pathname of the file in the header.

Time Stamp

The Time Stamp options let you choose whether the date that appears in the header is the date that the file was last modified or the date that the file was printed.

Print Rubber Stamp

When this option is selected, BBEdit prints a message in gray diagonally across the page. Use the pop-up menu to choose a font, and type the message in the text field. BBEdit chooses the right-size font to print the message.

If your printer supports grayscale printing, BBEdit prints the rubber stamp in gray, otherwise it is printed in outline style.

Note This feature is not supported by all printer drivers.

CHAPTER

4

Editing Text with BBEdit

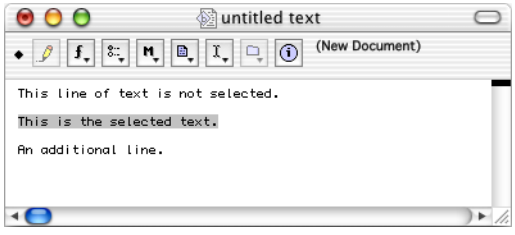
This chapter describes the basics of editing text with BBEdit, wrapping text, text manipulations, and file comparison.

In this chapter

Basic Editing **46**
Moving Text – 46 • *Multiple Clipboards* – 47 • *Drag and Drop* – 48
Multiple Undo **48**
Window Anatomy **48**
The Status Bar – 48 • *The Function Pop-Up Menu* – 50
The Split Bar – 51
Cursor Movement and Text Selection **51**
Clicking and Dragging – 51 • *Rectangular Selection* – 52
Arrow Keys – 52 • *Scrolling the View* – 53 • *The Delete Key* – 54
The Numeric Keypad – 54 • *Go To Line Command* – 55
Function Keys – 55
Text Options **56**
Editing Options – 57 • *Display Options* – 58
Font & Tabs **60**
Text Transformation **60**
Balance – 60 • *Exchange Characters* – 61 • *Change Case* – 61
Shift Left and Shift Right – 62 • *Add Line Breaks* – 62
Remove Line Breaks – 62 • *Rewrap Quoted Text* – 62
Increase and Decrease Quote Level – 63 • *Strip Quotes* – 63
Hard Wrap – 63 • *Zap Gremlins* – 63 • *Entab* – 64
Detab – 65 • *Resolve URL* – 65
How BBEdit Wraps Text **65**
Soft Wrapping – 66
Hard Wrapping – 67
The Mark Submenu **69**
Setting Markers – 70 • *Clearing Markers* – 70
Using Grep to Set Markers – 71
The Insert Submenu **71**
Inserting Files – 71 • *Inserting a Folder Listing* – 72
Inserting Paths – 72• *Inserting a Toolbox Call Template* – 72
Inserting a Page Break – 72
Comparing Text Files **73**
Multi-File Compare Options – 75
Using the Spelling Checker **76**
Checking Spelling – 76
Selecting Active Dictionaries – 78
Editing the User Dictionary – 78
Using an External Spelling Checker – 79

Basic Editing

BBEdit behaves like most Macintosh word processors and text editors. Characters that you type in an active window appear at the insertion point, a vertical blinking bar. You can click and drag the mouse to select several characters or words, and the selected text is highlighted in the system highlight color.



If you select some text and then type, whatever you type replaces the selected text.

To delete selected text, press the Delete key or choose Clear from the Edit menu. If you have a keyboard with a numeric keypad on it, you can press the Clear key on the keypad to delete the selected text.

In addition to clicking and dragging, you can use three selection commands in the Edit menu to select text.

To select…	Choose this from the Edit menu…
Line containing insertion point	Select Line
Paragraph containing insertion point	Select Paragraph
All text	Select All

You can then cut, copy, or perform any other action that affects the selected text.

Note BBEdit defines a paragraph as a block of text surrounded by blank lines (lines containing no characters other than tabs or spaces). The beginning and end of the document also mark the beginning and end of paragraphs.

Moving Text

To move text from one place to another, follow these steps:

1 **Select the text you want to move.**

2 **Choose Cut from the Edit menu.**

BBEdit removes the text from the window and stores it on the clipboard.

3 **Use the scroll bars to move to the new place for the text if necessary; then click to set the insertion point where the text is to be inserted.**

4 **Choose Paste from the Edit menu.**

You can paste the contents of the clipboard as many times as you want in any BBEdit window or in any other application.

Pasting inserts the text stored on the clipboard at the insertion point. If there is a selection, pasting replaces the selection with the contents of the clipboard.

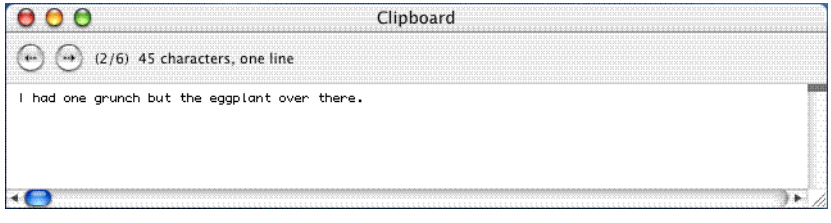
To place text on the clipboard without deleting it, choose Copy from the Edit menu.

Tip To add selected text to the existing contents of the clipboard, hold down the Shift key as you choose the Cut or Copy command. When you hold down the Shift key, BBEdit changes these commands to Cut & Append and Copy & Append.

Multiple Clipboards

BBEdit supports six separate clipboards. Each time you use the Cut or Copy command, BBEdit automatically switches to the next clipboard (wrapping back around to the first clipboard after the sixth). This way, the last six things you copied or cut are always available for pasting—sort of a "clipboard history."

By default, the Paste command pastes text from the most recently used clipboard, so if you do nothing special, BBEdit works just like any other Macintosh program. However, by using the Previous Clipboard command in the Edit menu you can access the previous clipboard contents. Next Clipboard moves forward through the clipboard history. There are also buttons in the Clipboard window (below) that let you move back and forth through the clipboards.



Once you have selected a clipboard using one of these methods, the next Cut, Copy, or Paste command will use the clipboard you chose. (Subsequent Cut or Copy commands will advance to the next clipboard; Paste never advances automatically.)

new in 7.0 Holding down the Shift key changes the Paste command to Paste Previous Clipboard, or you can use the key equivalent Command-Shift-V. This command, enabled whenever the last operation was a paste and the previous clipboard is non-empty, replaces the pasted text with the contents of the previous clipboard. The previous clipboard becomes current and will be used for any further paste operations; repeated applications of the command cycle backward through the available clipboards.

Note For compatibility with international text content, the Clipboard window displays text in the font (and font size) that it was put on the clipboard with. Changing the display font in the Clipboard window *does not* change the font of the underlying data.

Drag and Drop

Another way to move text from one place to another is by "drag and drop." If you drag and drop text from one window to another, BBEdit copies the text to the target window without removing it from the original window.

In addition, you can drag and drop an item from the Finder onto an editing window in BBEdit. If the item is a text file, the file's contents are inserted. If the item is a folder, a listing of the item's contents is inserted. If you hold down the Command key while dragging a folder, the path of the item is inserted instead.

Multiple Undo

BBEdit provides the ability to undo multiple edits, one action at a time. The number of edits that may be undone is limited only by available memory. The practical limitation is determined by the extent of the edits and the amount of free memory.

BBEdit also supports multiple Redos. If you have not made any changes after performing an Undo, you can redo each action, in order, by choosing that Redo command from the Edit menu or typing Command-Shift-Z. However, once you perform a new action, you cannot redo any actions that you undid before you made that change.

Window Anatomy

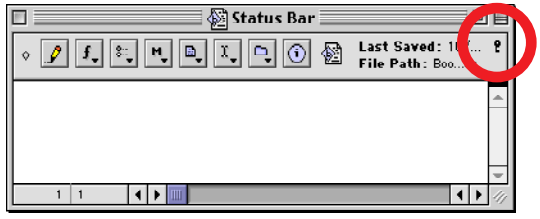
BBEdit windows have the same controls you are familiar with from other Macintosh applications (for example, windows are resizable and zoomable, and have both vertical and horizontal scroll bars). Two additional features, which may be less familiar, are the status bar and the split bar.

As described later in the section "Text Options," BBEdit windows may have additional elements if you choose the Show Line Numbers and Show Cursor Position options.

The Status Bar

The status bar is a panel at the top of editing windows containing buttons and pop-up menus that let you work with the text in the window. On Mac OS X, the status bar display is toggled by the button in the top-right corner of the window, as shown below:

On Mac OS 9, the status bar display is toggled by the "key" icon in the top-right corner of the window:



If the window contains a document that has been saved to disk, the status bar contains the full path to the file and the last time the file was changed. If the file has not been saved to disk, the status bar displays "(New Document)" instead of the file name.

Note Windows in which the text view status bar is not adjacent to the window title bar (for example, disk browsers and search results) no longer have a status bar control (on Mac OS 9 *or* Mac OS X), but do honor the global status bar preference, and you can use the Text Options dialog to show and hide the status bar on a per-window basis.

The icons on the status bar are indicators, buttons, and pop-up menus that give you quick access to commonly used functions. The following table explains each icon.

Icon	Meaning
◆ ◇	A solid diamond indicates that the document has been modified. A hollow diamond means only the *state* of the document (window position, selection range, scrolling position, and so on) has changed.
	The pencil icon indicates that the document can be modified. If the pencil has a slash across it, the document cannot be modified because the file is read-only, the disk is locked, or the file is part of a source-control system project (such as Projector or CVS) and is checked out. If the file is not on a locked disk, you can click the pencil icon to toggle the document's editability.
	The Function pop-up menu gives quick access to routines and functions in languages that BBEdit can parse. In HTML documents this menu lists the contents of the TITLE tag (if any), all named anchors in your document (that is, those defined with <A NAME="…">), all level 1–6 headings, any tags that have ID attributes, and any "BBmark" indicators, as well as all BBEdit include files referenced by the document.
	The Text Options pop-up menu contains commands such as Soft Wrap Text and Show Invisibles that let you control how the text appears in the window.
	The Mark pop-up menu contains commands such as Set Marker and Find & Mark that let you set or mark specific locations in the file; when present, these marked locations will be listed on the pop-up menu below the commands.
	The File pop-up menu contains commands that let you set line-break options, specify what state information is saved, and set Unicode file options if applicable.

Icon	Meaning
	The Insert pop-up menu contains commands that let you insert the contents of files, folder listings, and page breaks.
	The Path pop-up menu displays the list of folders that contain the document. You can use this menu to open any of the folders along the path in the Finder.
	For files that contain Projector state information, the Projector button displays a dialog box that shows the path to the current document, as well as its revision status. If a file does not contain such information, this button will not be displayed.
	The Info button displays a dialog box that lists the number of characters, words, lines, and pages in the document. Clicking this button is the same as choosing the Get Info command from the Window menu.
	The Super Get Info button asks Super Get Info to display information regarding the current document. This button is available only if you are running on Mac OS X *and* have Super Get Info installed on your computer. (Super Get Info is a Mac OS X file info utility from Bare Bones Software; see our web site for more details.)
	The Document button represents the current document. Clicking this button is the same as choosing Reveal in Finder from the Window menu: it opens the Finder window that contains the document. You can also drag the Document button to any other application, or you can drag it to the Trash (which is the same as choosing Close & Delete from the File menu).
	The key control lets you show and hide the status bar on Mac OS 9. (On Mac OS X, the status bar display is toggled by the button in the top-right corner of the window.)

The Function Pop-Up Menu

The Function pop-up menu lists the functions defined in this file for a programming language source file or, for an HTML document, the tags described in the description of the menu in the table above.

The following indicators appear in the pop-up menu to show the type of function.

Indicator	Meaning
•	The function containing the insertion point
†	C/C++ typedef
◊	C/C++ “#pragma mark” directive
italic name	C/C++ function prototype
1-6	Heading level (in HTML files)
tag name	Tag name for the indicated name or ID attribute value (in HTML files)

The Split Bar

Every editing window has a split bar, a small black bar above the scroll bar, that lets you split the window into two panes. Splitting the window lets you edit a document in two places at the same time. Each pane is independently scrollable.

Note Scrolling the non-active split view no longer automatically changes view focus as in older versions of BBEdit.

To split the window, simply drag the split bar down and let go.

To return to a single-pane window, drag the split bar (starting from anywhere along its length, not just at its right end) back up to its original position.

Tip Double-clicking the split bar unsplits a split window or restores the last-used split position. If the window has never been split, the window is split 50-50. To force a 50-50 split for a previously split window, you can Option-double-click the split bar when it is in its original position.

Cursor Movement and Text Selection

BBEdit gives you several ways to move the insertion point and change the selection. You can click and drag using normal Macintosh text selection techniques or you can use various keys on the keyboard.

Clicking and Dragging

You can select text in an editing window in the normal Macintosh fashion, by clicking and dragging. Holding down the Shift key while clicking or dragging extends the selection.

	No Modifier	Shift
Click	Move insertion point	Extend selection
Double-click	Select word	Extend selection to word
Triple-click	Select line	

Triple-clicking is the same as clicking in a line and then choosing the Select Line command from the Edit menu.

Holding the Command and Option keys as you click or double-click triggers special actions:

	Option	Command	Command + Option
Click		Open URL	
Double-click	Look up selected word in programming reference		Select word and search for next occurrence of the word

BBEdit optionally allows you to select entire lines by clicking in the left margin of an editing window. (If you have line numbers displayed, via the Show Line Numbers option in the Status Bar preference panel, you can click in the line number as well.) You can click and drag to select multiple lines, double-click to select an entire paragraph, or double-click and drag to select a range of paragraphs. A checkbox in the Text Editing preferences, labeled Allow Single-Click Line Selection, controls this behavior. If the checkbox is turned off, clicking in the left margin simply moves the insertion point to the beginning of the clicked line.

Rectangular Selection

new in 7.0 By holding down the Option key as you drag, or holding down the Shift and Option keys while clicking, you can select all text lying within a specified rectangular area. You can then perform all of the normal editing operations on this "rectangular selection," such as Cut, Copy, Paste, or drag and drop, as well as text transformations such as Change Case, Shift Left, Shift Right, Entab, Detab, Increase Quote Level, Decrease Quote Level, Strip Quotes, and Zap Gremlins.

IMPORTANT Rectangular selection and soft wrapping are mutually incompatible. When soft wrapping is enabled, dragging the mouse performs normal (non-rectangular) selection even if the Option key is held down; when there is a rectangular selection, the Soft Wrap Text option is unavailable in the Text Options pop-up menu and dialog box.

Arrow Keys

You can use the arrow keys to move the insertion point right, left, up, and down, and augment these movements with the Command, Option, and Control keys:

	No Modifier	Option	Command	Control
Up	Up one line	Up one screen	Start of document	(scroll view up)
Down	Down one line	Down one screen	End of document	(scroll view down)
Left	Left one character	Left one word	Start of line	(scroll view left)
Right	Right one character	Right one word	End of line	(scroll view right)

Holding down the Shift key extends the selection. For example, pressing Shift-Option-Right Arrow selects the word to the right of the insertion point.

If you are used to a word processor or text editor that lets you use Command-key combinations to page through your document, you may want to swap the meaning of the Option and Command keys:

1. **Open the Preferences window (by choosing Preferences from the BBEdit menu on Mac OS X or from the Edit menu on Mac OS 9.**
2. **Select the Text Editing preferences in the list on the left in the Preferences window.**
3. **Under the heading "Exchange Command and Option Key Behavior," select Horizontally, Vertically, or both, as you prefer.**

When active, these settings change the sense of the up- and down-arrow keys as follows:

	No Modifier	Option	Command
Up	Up one line	Start of document	Up one screen
Down	Down one line	End of document	Down one screen
Left	Left one character	Start of line	Left one word
Right	Right one character	End of line	Right one word

When the Shift key is held down, the arrow keys behave as described in the table above, except that the selection range is extended to include the new placement of the insertion point. (This is the same effect as typing the arrow-key combination and then holding down the Shift key and clicking at the original placement of the insertion point, or at the end of the original selection range.)

Scrolling the View

When holding down the Control key, the arrow keys will scroll document windows without moving the insertion point.

Accelerated Scrolling

When clicking the arrows in a scroll bar, you can use the Command and Option keys to accelerate the scrolling. On Mac OS X, these shortcuts also apply if you use a mouse with a built-in scroll wheel.

Modifier	Scroll Speed
none	Normal
Command	2x accelerated
Option	3x accelerated
Command+Option	6x accelerated

The Delete Key

The Delete key deletes the character to the left of the insertion point. If you have selected text, the Delete key deletes all the text in the selection. You can use the Command and Option keys to modify the way the Delete key works:

Modifier	Action
none	Deletes character to the left of the insertion point
Option	Deletes to the beginning of the word to the left of the insertion point
Command	Deletes to the beginning of the line
Command+Option	Deletes to the beginning of the document

Holding down the Shift key with the Delete key makes the Delete key work the same way as the Forward Delete key on extended keyboards. This feature is particularly useful on PowerBooks.

To enable this feature:

1. **Open the Preferences window (by choosing Preferences from the BBEdit menu on Mac OS X or choosing Preferences from the Edit menu on earlier Mac OS versions).**
2. **Select Text Editing from the list on the left in the Preferences window.**
3. **Select Enable Shift-Delete for Forward Delete.**

Note If you have activated Horizontally for Exchange Command and Option Key Behavior as described in the previous section, the effects of Command and Option shown in the table above will be reversed accordingly.

The Numeric Keypad

Most Macintosh keyboards have a numeric keypad on the right side. Normally, you use the keys on the keypad to enter numbers. If you prefer, you can use the numeric keypad to move the insertion point:

1. **Open the Preferences window (by choosing Preferences from the BBEdit menu on Mac OS X or choosing Preferences from the Edit menu on Mac OS 9).**
2. **Select Text Editing from the list on the left in the Preferences window.**

3 Mark the Use Numeric Keypad for Cursor Movement checkbox.

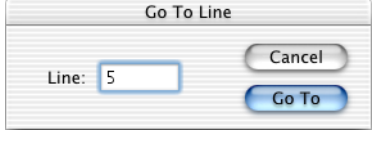
start of line **7**	up **8**	Scroll up **9**
left **4**	show selection **5**	Right **6**
end of line **1**	down **2**	Scroll down **3**

You can use the Shift key with the keys on the numeric keypad to extend a selection. You can use the Command and Option keys with the 2, 4, 6, and 8 keys as you would the arrow keys.

To toggle the behavior of the keypad between moving the cursor and entering numbers, hold down the Option key and press the Clear key in the upper-left corner of the keypad. (This key is also labeled Num Lock on some keyboards.)

Go To Line Command

To move the insertion point to a specific line, use the Go To Line command in the Search menu. When you choose this command, BBEdit opens the Go To Line dialog box.



Type the number of the line you want to move to and click Go To.

Note The Go To Line command honors the "Use 'Hard' Line Numbering in Soft-Wrapped Views" option in the Text Editing panel of the Preferences window.

Function Keys

If your keyboard has function keys, you can use the following key equivalents for cutting and pasting, to scroll, and to move the insertion point.

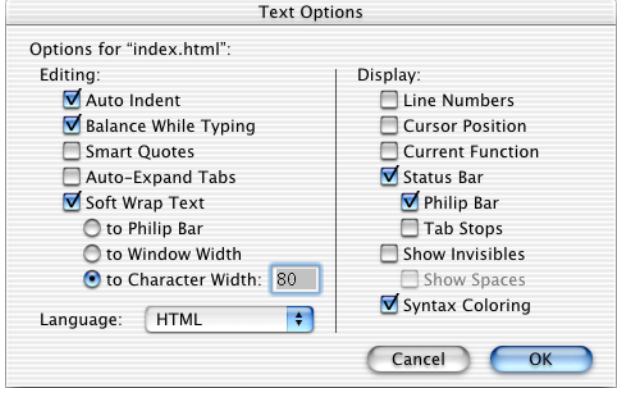
	No Modifier	Option	Command	Shift
F1	Undo			Redo
F2	Cut			Cut & Append
F3	Copy			Copy & Append
F4	Paste			

	No Modifier	Option	Command	Shift
del	forward delete	delete to end of word	delete to end of line	
Home	scroll to top of document		move insertion point to start of document	
End	scroll to end of document		move insertion point to end of document	
Pg Up	scroll page up			
Pg Dn	scroll page down			

Note Holding down the Command and Option keys as you press the forward delete key deletes to the end of the document.

Text Options

You can use the Text Options command (formerly Window Options) to change the way BBEdit edits text and the way it displays text and additional elements in its windows.



The Text Options dialog box is divided into two parts: the Editing options on the left control the way BBEdit behaves while you type, and the Display options on the right control the appearance of the BBEdit window.

You can also change many of the text options through the Text Options pop-up menu (left) in the status bar.

Changes you make in the Text Options dialog box affect only the active document window. To make changes that apply to all new windows that you open, use the Editor Defaults and Status Bar sections of the Preferences window.

Editing Options

These options control the way BBEdit behaves as you type text in the active document window. Changes you make here affect only that window. To change editing behavior in windows that you open in the future, use the Editor Defaults section of the Preferences window.

Auto Indent

When this option is selected, pressing Return automatically inserts spaces or tabs to indent the new line to the same level as the previous line.

Tip To temporarily invert the sense of the Auto Indent option, hold down the Option key as you press the Return key.

Balance While Typing

When this option is selected, BBEdit flashes the matching open parenthesis, brace, or bracket when you type a closing one. This option is useful when you use BBEdit to edit source files, to ensure that all delimiters are balanced.

Smart Quotes

When this option is on, BBEdit automatically replaces straight quotes (" ') with typographer's quotes (“ ” ‘ ’). If you need to type a straight quote when this option is selected (or to type a typographer's quote when the option is not selected), hold down the Control key as you type the " or ' key.

Note Smart quote marks should not be used in HTML documents, since they will not display correctly; you must use straight quotes, or entity codes, instead. We recommend leaving this option turned off if you are editing HTML content or program code.

Smart Editing

Note The Smart Editing option has been removed as of BBEdit 6.5. (It wasn't smart enough.)

Auto-Expand Tabs

When this option is selected, BBEdit inserts an appropriate number of spaces when you press Tab, rather than inserting a tab character.

Soft Wrap Text

When this option is selected, BBEdit soft-wraps the text in the file to the right margin that you choose: the Philip Bar, the window width, or a specific number of characters. The Philip Bar is a gray line in the status bar that indicates the right edge of the usable viewing area on a 9-inch (original Mac) monitor and also corresponds to a width of 80 characters in the 9-point Monaco font.

See “How BBEdit Wraps Text” later in this chapter to learn how wrapping works in BBEdit.

Language

The Language menu lets you specify which source code language the file uses. The file's language setting affects how BBEdit performs syntax coloring and parses function names for the function pop-up menu. BBEdit generally determines the file's language from its filename extension, using the mapping table in the Languages panel of the Preferences window. For example, .c files are C, and .m files are Objective-C. You can use this menu to override those settings for a specific file. To quickly check the language for a file, click the Text Options pop-up menu in the status bar and look at the Languages item.

Display Options

These options control the way BBEdit displays the text in the active document window. Changes you make here affect only that window. To change display characteristics for windows that you open in the future, use the settings available in the Preferences window. The Show Invisibles and Syntax coloring options are in the Editor Defaults panel. The rest of the options are in the Status Bar panel.

Status Bar

This option shows or hides the status bar in the active window. When this option is selected, two suboptions are available.

- The Philip Bar option shows or hides a thin gray line in the status bar.
- The Tab Stops option shows or hides tick marks in the status bar that indicate the tab stops in the window.

Line Numbers

This option displays line numbers along the left edge of the window.

Cursor Position

This option adds a panel in the bottom-left frame of the window that displays the location (line and column) of the insertion point or the last-changed end of the selection range.

Current Function

This option adds a panel in the bottom-left frame of the window that displays the name of the function that contains the insertion point or current selection.

Show Invisibles

This option shows or hides non-printing characters in the window. Select this option when you want to see line breaks, tabs, and "gremlins" (other invisible characters). BBEdit uses these symbols:

Symbol	Meaning
∆	tab
◊	space
•	non-breaking space
¬	line break

Symbol	Meaning
¶	page break
¿	other non-printing or special characters

When the Show Invisibles option is selected, the Show Spaces suboption is available, letting you turn off the visually "noisy" spaces.

Note Starting with version 6.5, BBEdit no longer hides the form feed character, which was invisible in older versions. However, when the Show Invisibles option is active, form feeds will still be replaced by the special character mark shown above.

Syntax Coloring

When this option is selected and the editing window contains a document in a programming language BBEdit recognizes, BBEdit displays keywords and other language elements in color.

BBEdit uses several methods to determine what language (if any) to use for a particular file. The primary way to activate syntax coloring in a document is simply to save it with a file name extension that indicates what programming or markup language the file contains. For example, if you save your file with ".html" at the end of the file name, BBEdit will color your HTML tags and anchors. Other common suffixes are ".tex" for TeX files and ".c" for C files.

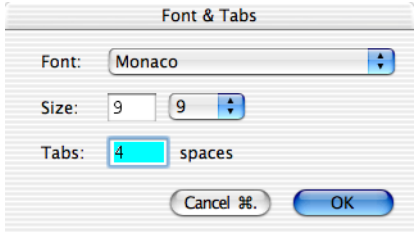
For any file whose name does not have an extension, or whose name has an extension that does not match any of the mappings in BBEdit's Languages preferences, BBEdit will attempt to guess what language the file contains and apply the appropriate syntax coloring. If BBEdit guesses wrong (or is unable to guess), you can resort to the Language submenu of the Text Options pop-up menu in the status bar or the Language pop-up menu in the Text Options dialog, which gives you the ability to manually select *any* installed language to be applied to the document, regardless of its name. If the file is saved with "BBEdit" state, the manual language selection will persist and override any suffix mapping.

By default, BBEdit recognizes over 20 different languages and several dozen suffix mappings. You can add new suffixes to map to existing languages or (by installing third-party language plug-ins) add syntax coloring support for new languages as well. All the specific languages that BBEdit recognizes, and the suffixes or extensions it expects for them, are listed in the Languages preference panel, and suffix mappings can also be changed there. You can choose the colors that BBEdit uses for syntax coloring in the Text Colors preference panel.

new in 7.0 BBEdit will now recognize and syntax-color VBScript embedded within HTML via the <%…%> and <SCRIPT>…</SCRIPT> tags.

Font & Tabs

You can choose the font, font size, text style, and tab spacing for a window by choosing Font & Tabs from the Text menu. The Font & Tabs dialog appears.



You can choose the desired font, font size, and style using controls in this dialog. You can also tell BBEdit how many spaces occur between tab stops.

IMPORTANT The chosen display style will be used for *all* text in the window; BBEdit does not support the use of selective text styles.

Note The changes you make here affect only the active document. This dialog's settings will be saved with the document if you choose BBEdit State information when saving. To set the default font, size, style, and tab information for new documents (or for documents that do not have a saved state), see the Fonts panel of the Preferences window.

BBEdit also displays a Fonts menu in its menu bar by default as a alternative to opening the Font & Tabs dialog to change the font. This menu is especially useful when you are working with multi-byte text documents for which you need to choose specific display fonts. If you do not need this menu, use the Application panel of the Preferences window to turn it off.

Note On Mac OS X, additional font size choices of 11 and 13 points are available on the Fonts menu. These sizes are not shown on Mac OS 9, although you can set them using the Font & Tabs dialog if you desire.

Text Transformation

BBEdit provides several commands that transform text in useful ways. All of these commands are in the Text menu.

Balance

This command locates the pair of parentheses, braces, brackets, or smart (curly) quotes that surround the insertion point or the current selection. If there are unmatched delimiters within this area, BBEdit beeps. You can also double-click a delimiter character to invoke this command.

When syntax coloring is active for a document, Balance (including auto-balance) will ignore balance characters that appear inside strings or comments.

Exchange Characters

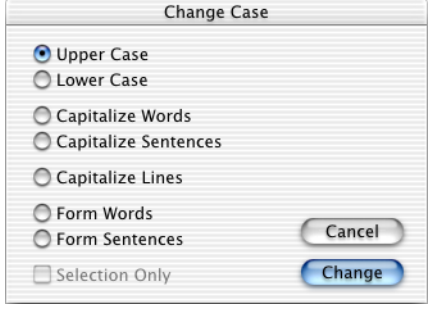
This command (once named Twiddle) swaps two characters according to the following rules:

- If there is no selection and the insertion point is not at the beginning or end of a line or of the document, this command transposes the two characters on either side of the insertion point.
- If the insertion point is at the beginning of a line or document, this command transposes the two characters following the insertion point.
- If the insertion point is at the end of a line or document, this command transposes the two characters before the insertion point.
- If there is a selection, this command transposes the characters at *either end* of the selection.

If you hold down the Option key as you choose this command, Exchange Characters becomes Exchange Words. Exchange Words behaves like Exchange Characters except that it acts on entire words rather than individual characters.

Change Case

This command lets you change between uppercase and lowercase characters, or capitalize word, line, or sentence starts. You can choose to change the text in the current selection or in the whole document. When you choose the Change Case command, the following dialog appears:



The radio buttons let you choose how to change the case of the text. To limit the change to the selection, click the Selection Only option. The following table explains the function of each radio button in this dialog.

This button…	Changes the text like this…
Upper Case	Every character changes to uppercase.
Lower Case	Every character changes to lowercase.
Capitalize Words	The first character of every word changes to uppercase; other characters remain unchanged.
Capitalize Sentences	The first character or every sentence changes to uppercase; other characters remain unchanged.

This button…	Changes the text like this…
Capitalize Lines	The first character of every line changes to uppercase; the other characters remain unchanged.
Form Words	The first character of every word changes to uppercase; other characters change to lowercase.
Form Sentences	The first character of every sentence changes to uppercase; other characters change to lowercase.

Shift Left and Shift Right

These commands indent or outdent the selected text by one tab stop. If you hold down the Shift key while choosing one of these commands, the selected text will be indented or outdented by one space instead of one tab stop.

BBEdit will also now entab and detab on the fly as you shift text. For example, if the selected text is indented one tab stop and you apply Shift Left One Space, the tab will be converted to spaces and the text will be outdented one space. If you then apply Shift Right One Space, the spaces will be converted back to a single tab.

Add Line Breaks

This command (once named Insert Line Breaks) inserts a hard line break at the end of each line of text as displayed. If there is any text selected, only that text will have line breaks added; otherwise, line breaks will be added to the entire document. See "How BBEdit Wraps Text" later in this chapter for more information.

Remove Line Breaks

This command (once named Unwrap) removes carriage returns and spaces between groups of text. Use this command to turn text that has hard line breaks into text that can be soft-wrapped. See "How BBEdit Wraps Text" later in this chapter for more information.

Rewrap Quoted Text

This command rewraps hard-wrapped text with Internet-style quoting, while retaining the quoting characters. In Internet messages, it is common to use the ">" symbol to indicate that part of a message is quoted from a message that is being replied to. As a message gets batted back and forth in a discussion, the oldest bits of text will end up having several ">" symbols in front of them. Each line of text in the message has a carriage return at the end, making rewrapping the text to a different width somewhat problematic.

This command causes BBEdit to first extract each chunk of quoted text—that is, successive lines of text with the same number of markers. The markers are temporarily removed, and BBEdit removes the hard line breaks in the text, forming it into a soft-wrapped paragraph. The text is then hard-wrapped according to the settings in the dialog, which are the same as for the Hard Wrap command (described later), and the quote markers are reinserted.

Note When you use the Rewrap Quoted Text command on a rectangular selection, lines will be padded with spaces as necessary.

Increase and Decrease Quote Level

This command inserts or deletes a standard Internet quote character (“>”) from the selected hard-wrapped text, or on the current line if there is no selection.

Strip Quotes

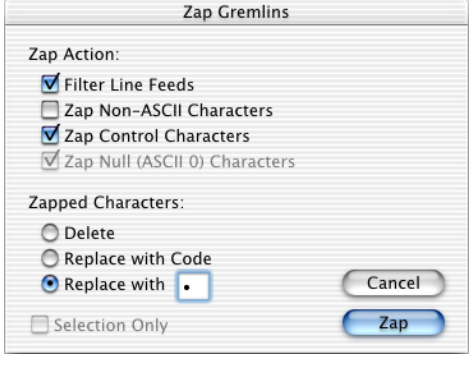
This command removes all Internet-style quoting from the selected hard-wrapped text, or from the entire document if there is no selection.

Hard Wrap

This command wraps long lines by inserting hard line breaks and can reflow (fill) paragraphs if desired. See “How BBEdit Wraps Text” later in this chapter for more information.

Zap Gremlins

This command removes or replaces non-printing characters. Use this command when you have a file that may contain extraneous control characters or “gremlins.”



The checkboxes in the top half of the dialog box determine which types of characters the Zap Gremlins command affects, while the radio buttons determine what is done with gremlins that are found.

Filter Line Feeds

When this option is selected, Zap Gremlins converts the file’s contents as if it were opened with LF Translation turned on.

Zap Non-ASCII Characters

When this option is selected, Zap Gremlins zaps *all* characters in the file that do not fall in the 7-bit (or ASCII) range. Examples of such characters include special Macintosh characters such as bullets (•) and typographer’s quotes (“ and ”, ‘ and ’), as well as all multi-byte characters. In general, such special characters are those that you type by holding down the Option key.

Zap Control Characters

When this option is selected, Zap Gremlins zaps a specific group of invisible ASCII characters, also known as control characters. Control characters can cause compilers and other text-processing utilities to malfunction, and are therefore undesirable in many files.

Zap Null (ASCII 0) Characters

When this option is selected, Zap Gremlins zaps all instances of the null character (ASCII 0). If Zap Control Characters is selected, this option will be enabled automatically. It is included separately in case you want to remove only nulls without affecting other control characters that may be present in a file.

Note Older versions of BBEdit were unable to perform grep searches on files that contained nulls; this limitation has been removed starting with BBEdit 6.5, but nulls may cause malfunctions in other external text-processing programs.

The radio buttons in the bottom part of the dialog determine how the Zap Gremlins command zaps the offending characters. These options do not affect the line break characters that the Filter Line Feeds option filters.

Delete

This option removes the zapped character completely from the text. It is useful if you are only interested in destroying gremlins and you do not care where they were in the text.

Replace with Code

This option replaces the gremlin character with an escaped hexadecimal code. The escape code is in the convention used by the C programming language and Apple's Rez resource-description language: \0x followed by the character code in hexadecimal (base 16). This option is useful for identifying both the value and the location of gremlin characters. Later, you can search for occurrences of \0x to locate the converted characters. (Searching for the grep pattern of "\\0x.." will select the entire character code for easy modification or deletion.)

Replace with

This option replaces the gremlin with the character you type in the text field next to the radio button. It is useful for identifying the location of gremlins, but not their value.

Selection Only

If this checkbox is marked, only the selection is processed, otherwise gremlins will be zapped throughout the entire document.

Entab

This command converts runs of spaces into tabs, according to the setting in the Font & Tabs dialog box. This transformation is useful when you are downloading text from a mainframe computer or online service, when the document uses spaces to line up columns of text. If you do not use a monospaced font, columns usually will not line up unless you entab the text first.

Detab

This command converts tabs into runs of spaces, according to the setting in the Font & Tabs dialog box. This command is useful when you are uploading text to a mainframe computer or online service that has no concept of tabs as column separators.

Resolve URL

To resolve a URL (Uniform Resource Locator), place the insertion point anywhere in the URL and choose this command. Alternatively, you can Command-click anywhere in the URL, or Control-click to bring up the contextual menu, and choose Resolve URL from it. BBEdit examines the URL and launches the appropriate Internet helper application. If the URL is not valid or the helper application cannot be found, BBEdit beeps.

Note The Internet Helpers (globe) menu has been removed entirely from BBEdit 7.0.

Note Some Web browsers cannot resolve URLs if the request is sent when the browser is starting up. If your Web browser does not properly resolve the URL, wait until the browser has finished starting up and then try again.

Bare Bones Software gratefully acknowledges John Norstad for providing the URL parsing code.

How BBEdit Wraps Text

BBEdit wraps text in one of two ways: soft wrapping or hard wrapping.

Soft wrapping is like the word wrapping found in most word processors. When the insertion point reaches a right margin as you type, the word processor automatically moves the insertion point to the beginning of the next line. You never need to type a carriage return (that is, press the Return key) at the end of a line, but only to start a new paragraph. If you place the insertion point in the middle of a paragraph and start typing, the text reflows so that words that are pushed out beyond the right margin end up on the next line. Usually, you use soft wrapping when you are editing memos, mail messages, and other prose. It is also useful for HTML documents. With soft wrapping, you generally do not have to scroll the window horizontally to see all the text in the file.

Unlike soft wrapping, hard wrapping requires a carriage return at the end of every line. When soft wrapping is turned off, BBEdit lets you type as far as you like on a line, and never automatically moves the insertion point to the beginning of the next line. You have to manually type a carriage return to start a new line. You usually use hard wrapping to write programs, tabular data, resource descriptions, and so on. With hard wrapping, each line of source code or data appears on its own line in the window, although you may have to scroll the window horizontally to see the entire line if it is long.

Note When you use the Hard Wrap command on a rectangular selection, lines will be padded with spaces as necessary.

Tip If you open a file in BBEdit that appears to consist of a few very long lines, you should select the soft wrapping option for that file.

This table summarizes the commands to soft-wrap and hard-wrap text. The sections that follow give details about using the wrapping commands.

To do this…	Do this…
Soft-wrap text as you type	Choose Soft Wrap Text from the Text Options pop-up menu (left) or select the Soft Wrap Text option from the Text Options dialog
Convert hard-wrapped text to soft-wrapped text	Use the Remove Line Breaks command in the Text menu, and activate soft wrapping
Convert soft-wrapped text to hard-wrapped text	Use the Add Line Breaks command in the Text menu
Hard-wrap text to a specific margin, reflowing paragraphs as needed	Use the Hard Wrap command in the Text menu

Users of very old versions of BBEdit or BBEdit Lite will note that the Wrap while Typing option (which hard-wrapped text automatically by inserting a Return when you reach the right margin) has been relegated to the dustbin of history. It has been superseded by soft wrapping.

Soft Wrapping

To turn on soft wrapping for the active window do one of the following:

- Choose Soft Wrap Text from the Text Options pop-up menu (left) in the status bar.
- Select the Soft Wrap Text option from the Text Options dialog by choosing Text Options from the Edit menu.

To specify the wrapping margin, use the Text Options command. You can have text wrap at the Philip bar, the edge of the window, or a specific character position.

IMPORTANT Soft wrapping and rectangular selection are mutually incompatible. When soft wrapping is enabled, dragging the mouse performs normal (non-rectangular) selection even if the Option key is held down; when there is a rectangular selection, the Soft Wrap Text option is unavailable in the Text Options pop-up menu and dialog box.

To make soft wrapping the default for new windows, select the Soft Wrap Text option in the Editor Defaults panel of the Preferences window. You can also use the settings in that panel to specify the default wrapping margin.

To "freeze" the current line endings and hard-wrap the text at the current soft wrapping settings, use the Add Line Breaks command to insert a carriage return at the end of each line.

While BBEdit prefers to break lines at white space when soft-wrapping, lines will be broken as close as possible to the designated wrap width if they do not contain any white space. This way, long URLs and other extended strings of characters are visible without requiring horizontal scrolling.

Exporting Soft-Wrapped Text

BBEdit will not insert hard line breaks into Unix or DOS-format files upon saving (although versions of BBEdit prior to 4.5 did).

Soft Wrapping in Browsers

Use the Text Options command from the Edit menu to control soft wrapping (and other display options) for files viewed in a browser window.

Soft Wrapping and Line Numbers

The preference Use "Hard" Line Numbering in Soft-Wrapped Views controls the way line numbers are displayed when you use soft wrapping. If this option is turned on, the line number bar, cursor position display, and Go To Line commands in editing views will use line numbers that correspond to "hard" carriage returns in the document, rather than to soft-wrapped line breaks. To restore the behavior of previous versions of BBEdit, turn this preference off.

Hard Wrapping

The easiest way to hard-wrap text is to type a carriage return (by pressing the Return key) whenever you want to start a new line. If the file you are editing is a program, it is best to turn off soft wrapping altogether.

To turn off soft wrapping for the active window, do one of the following:

- Choose Soft Wrap Text from the Text Options pop-up menu in the status bar.
- Deselect the Soft Wrap Text option from the Text Options dialog box by choosing Text Options from the Edit menu.

To turn off soft wrapping for new windows, deselect the Soft Wrap Text option in the Editor Defaults section of the Preferences window.

BBEdit provides two ways to convert soft-wrapped text into hard-wrapped text. The first is a simple technique that uses a single command; the second is a bit more complicated but gives you much more control over wrapping.

Hard-Wrapping Soft-Wrapped Text

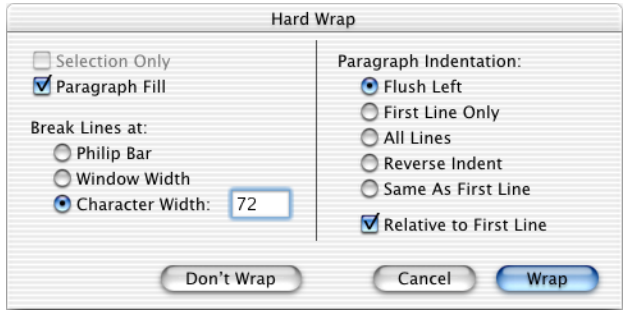
To convert soft-wrapped text to hard-wrapped text, use the Add Line Breaks command in the Text menu. This command inserts a carriage return at the end of every line of the text as it appears in the window. If your wrapping margin is the edge of the window, you will get different results depending on the width of the window.

Note The Add Line Breaks command does not turn off soft wrapping.

Hard Wrapping and Filling Text

The Hard Wrap command in the Text menu gives you more flexibility over hard-wrapping text than the Add Line Breaks command. While Add Line Breaks merely freezes the line breaks as they appear in the editing window, whereas the Hard Wrap command lets you specify a wrapping margin, apply the command to the selection only, and reflow paragraphs.

When you choose the Hard Wrap command, BBEdit opens this dialog box:



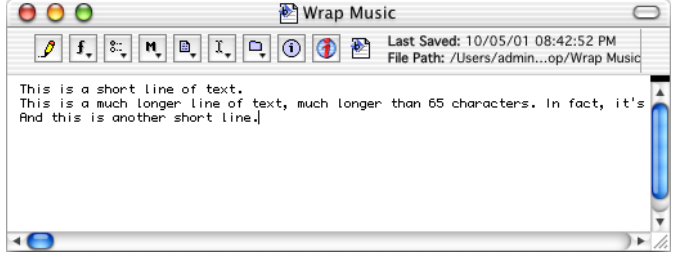
The controls in the left half of the dialog control how much of the text is hard-wrapped and the maximum length of lines after hard wrapping. The controls in the right half determine how this command deals with paragraphs.

The Selection Only option limits the effect of the command to the selected text. If this option is not selected, the command affects the entire contents of the window.

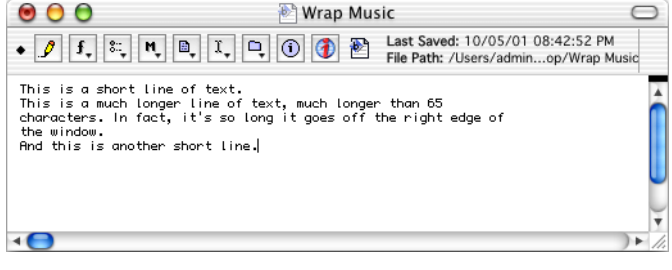
The "Break Lines at" buttons let you specify the wrapping margin.

If the Paragraph Fill option is selected, BBEdit forms the lines into paragraphs before wrapping the lines. An example is the best way to illustrate this option.

Suppose you start with this text:

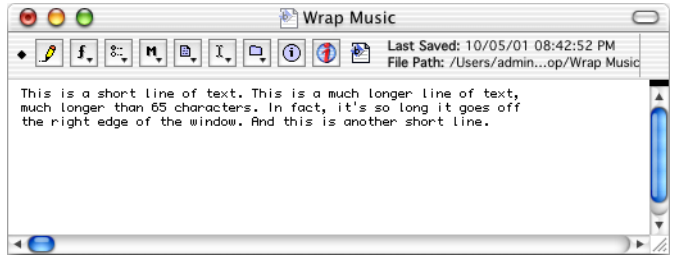

Wrap Music
Last Saved: 10/05/01 08:42:52 PM
File Path: /Users/admin...op/Wrap Music
This is a short line of text.
This is a much longer line of text, much longer than 65 characters. In fact, it's
And this is another short line.

This is what happens when you wrap to 65 characters with Paragraph Fill off:


Wrap Music
Last Saved: 10/05/01 08:42:52 PM
File Path: /Users/admin...op/Wrap Music
This is a short line of text.
This is a much longer line of text, much longer than 65
characters. In fact, it's so long it goes off the right edge of
the window.
And this is another short line.

BBEdit breaks the long line at the 65-character right margin (twice, because the line was so long) and leaves the short lines alone.

This is what happens to the same text when you wrap with Paragraph Fill on:


Wrap Music
Last Saved: 10/05/01 08:42:52 PM
File Path: /Users/admin...op/Wrap Music
This is a short line of text. This is a much longer line of text,
much longer than 65 characters. In fact, it's so long it goes off
the right edge of the window. And this is another short line.

BBEdit joins all the lines together to form a paragraph and then wraps the text to the 65-character margin.

The Paragraph Indentation buttons let you indent paragraphs after they have been wrapped.

- Flush Left does not indent paragraphs at all.
- First Line Only indents the first line by one tab stop. The rest of the paragraph is flush against the left edge of the window.
- All Lines indents all lines in the paragraph by one tab stop.
- Reverse Indent places the first line in the paragraph flush against the left edge of the window and indents all other lines in the paragraph by one tab stop.
- Same As First Line indents all lines to the same indentation as the first line of the selection or document.

Mark the Relative to First Line checkbox to make any paragraph indents relative to the original indent of the first line of the selection or document. If you want paragraph indents to be relative to the left margin of the document, make sure this checkbox is not marked.

Click the Wrap button to perform the Hard Wrap command. Click the Don't Wrap button to save the settings without changing the text.

Tip If you hold down the Option key as you choose the Hard Wrap command, BBEdit uses the last Hard Wrap settings to perform the operation, without displaying a dialog box.

The Mark Submenu

A marker is a selection range that you can name. If a document contains any markers, you can select them from the Mark pop-up menu to move quickly to the specified section of the file. BBEdit uses the MPW marker format, which is supported by most Macintosh text editors.

Note If you are programming, you may be tempted to use markers to mark functions in your source code. However, if BBEdit supports the language you are using, this is usually unnecessary; your functions will automatically appear in the Function pop-up menu in the document window.

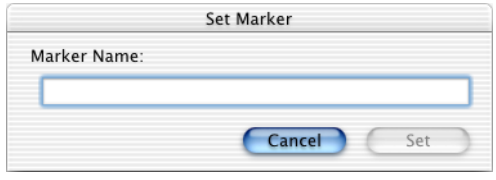
Setting Markers

To set a marker:

1 **Select the text you want to mark.**

2 **Choose the Set Marker command from the Mark pop-up menu (identified by the icon shown at left), or Control-click the selected text and choose Set Marker from the contextual menu.**

BBEdit opens the Set Marker dialog box so that you can name the marker. If you have selected a range of text, the dialog box will contain the first characters of the selection.



3 **Click Set to set the marker.**

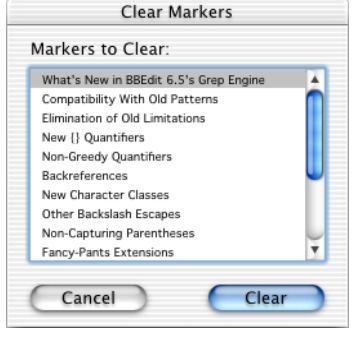
Tip If you hold down the Option key as you choose Set Marker, BBEdit sets the marker using the leading characters of the selected text as the name of the marker, without displaying a dialog box.

Clearing Markers

To clear a marker:

1 **Choose the Clear Markers command from the Mark pop-up menu.**

BBEdit displays the list of markers.



2 **Select the marker you want to delete.**

3 **Click Clear to clear the marker.**

BBEdit also offers a Clear All Markers command, which clears all the markers in the document in one fell swoop. You can access this command by holding down the Option key and using the Mark pop-up menu.

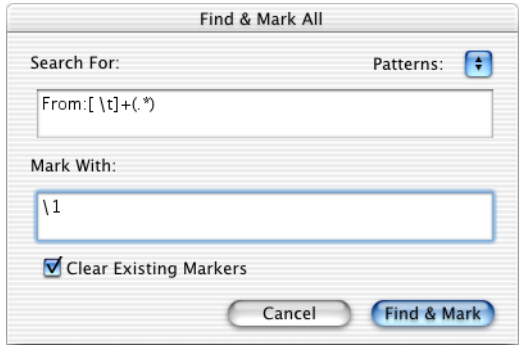
Using Grep to Set Markers

You can use the Find & Mark All command in the Mark pop-up menu to mark text that matches a grep pattern. To learn more about using grep patterns, see Chapter 8, "Searching with Grep."

To use a grep pattern to mark text:

1 **Choose the Find & Mark All command from the Mark submenu.**

BBEdit opens the Find & Mark All dialog box.



2 **Type the pattern in the Search For field and the marker names in the Mark With field.**

You can also choose stored patterns from the Patterns pop-up menu.

3 **Click Find & Mark to mark the matching text.**

BBEdit searches the active window for text that matches the pattern and marks it the way you specified.

The Insert Submenu

In addition to typing, you can use the commands in the Insert submenu of the Edit menu to insert text into the active window. These commands, which are also available in the Insert pop-up menu (left) in the document status bar, let you insert the contents of other files, folder listings, Macintosh Toolbox templates, and page break characters.

Inserting Files

The Insert File Contents command inserts the contents of one or more files into the document you are editing. When you use this command, BBEdit displays the Open dialog box and lets you select the files to insert. To insert more than one file hold down the Shift key or Control key as you click the files. BBEdit then inserts the files at the insertion point or replaces the selected text. If you select more than one file, the files are inserted in alphabetical order, according to file name.

new in 7.0.2 When you use the Insert File Contents command, you can now select more than one file from the dialog box.

Tip You can also use the File Contents command in the Insert pop-up menu in the status bar, or you can drag a file's icon from the Finder into a BBEdit editing window to insert the contents of that file.

Inserting a Folder Listing

The Insert Folder Listing command inserts a textual listing of a folder hierarchy. When you use this command, BBEdit displays a directory dialog box that lets you select a folder to insert. BBEdit inserts the folder listing at the insertion point or replaces the selected text.

Tip You can also use the Folder Listing command in the Insert pop-up menu in the status bar to insert a folder listing, or you can drag a folder's icon from the Finder into a BBEdit editing window to insert a folder listing.

Inserting Paths

The Insert File Path command inserts the full path information for a selected file into the document you are editing, and the Insert Folder Path command inserts the full path information for the contents of the selected folder hierarchy. When you use these commands, BBEdit opens a directory dialog box that lets you select the file or folder. BBEdit inserts the path information at the insertion point or replaces the selected text.

Tip You can also use the File Path or Folder Path command in the Insert pop-up menu in the status bar to insert path information.

Inserting a Toolbox Call Template

To paste a call template for a Toolbox function from THINK Reference, select the function's name and choose Toolbox Call Template from the Insert submenu of the Edit menu. BBEdit launches THINK Reference if necessary and replaces the selected text with a call template for the function.

If there is no selection when you choose this command, BBEdit prompts you for the name of a function and inserts its call template at the insertion point.

Tip You can also use the Toolbox Call Template command in the Insert pop-up menu in the status bar to insert a Toolbox call template.

Note If Mac OS X Developer Help is in use, this command will be disabled, since the developer help center does not support call templates.

Inserting a Page Break

To insert a page break, choose the Page Break command from the Insert submenu of the Edit menu. This will place a form feed character (ASCII 12) at the location of the insertion point. BBEdit uses this character to indicate the start of a new page when printing.

Tip You can also use the Page Break command in the Insert pop-up menu in the status bar to insert a page break.

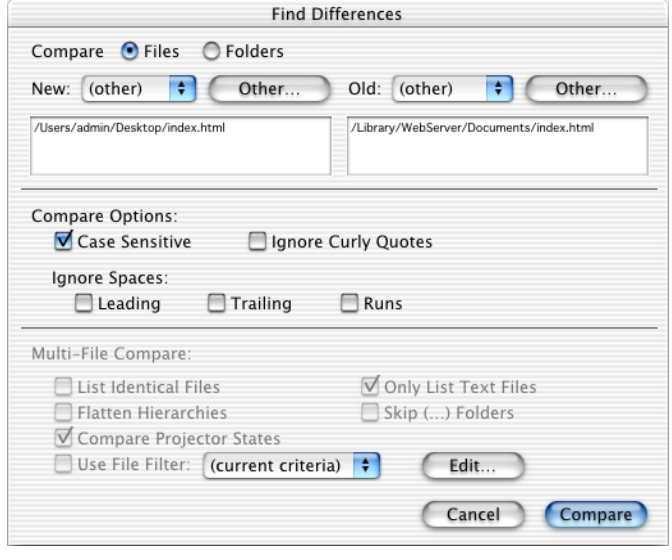
Comparing Text Files

If you have ever had to reconcile changes between two different versions of a file, or even larger numbers of documents, you know how laborious this task can be. BBEdit's Find Differences command is a powerful tool for doing such comparisons faster and more effectively. Using Find Differences, you can compare any two files, or the contents of two folders. You can also specify options to eliminate minor variations in document content, such as different amounts of white space, from being considered.

To compare two files:

1 **Choose the Find Differences command from the Search menu.**

BBEdit opens the Find Differences dialog box.



2 **Click the Files radio button.**

3 **Use the New and Old pop-up menus to select the files you want to compare.**

If the files you want to compare are already open, they will appear in the pop-up menus; otherwise, you can select them by clicking the Other button next to one of the pop-up menus, or by dragging the files' icons from the Finder into the New and Old boxes in the Find Differences dialog.

You can also select recently opened files from the Recent Files item on the pop-up menu.

The terms "new" and "old" are used for convenience since most often you will want to compare the changes in the same file across time. However, the Find Differences command can be used to compare any two files.

4 **Select the Compare options that apply.**

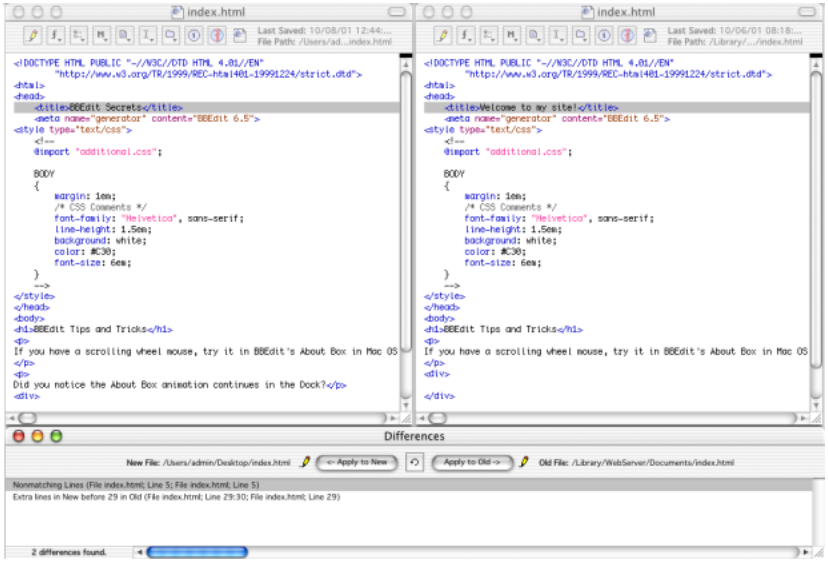
When the Case Sensitive option is selected, BBEdit distinguishes uppercase from lowercase letters; deselect this option if you want BBEdit to consider uppercase and lowercase letters the same.

When Ignore Curly Quotes is selected, BBEdit treats typographers' quotes the same as straight quotes.

When one of the Ignore Spaces options is selected, BBEdit ignores any tabs and spaces at the beginning or end of lines (Leading or Trailing, respectively) or runs of more than one space.

5 **Click Compare to perform the comparison.**

If the two files are different, BBEdit tiles the windows for the files side by side and opens a Differences window below them.



Tip You can change this arrangement with the Arrange command in the Window menu. To change the default arrangement, use the Differences section of the Preferences window.

The Differences window lists all the differences between the new file and the old file. To see the differences in context, click a line in the Differences window; BBEdit scrolls and selects that spot in both files.

Use the Apply to New and Apply to Old buttons in the Differences window to make the new file look like the old file or vice versa. After you use one of these buttons, BBEdit italicizes the line in the Differences window to indicate that you have already applied that change.

If a Differences window is open and is the frontmost window, the Compare Again command in the Search menu will recompare the two files being compared and refresh the list of differences accordingly. The small button (with the circular icon) between the Apply to New and Apply to Old buttons performs the same function.

Note You can also compare the current clipboard contents against any file. Just choose Clipboard from either the New or the Old pop-up menu in the Find Differences dialog when the Clipboard window is open.

Multi-File Compare Options

You can compare multiple files at once by selecting the Folders button in the Find Differences dialog; BBEdit lists all the files and marks those that are different with a bullet. You have the additional options described below.

List Identical Files

Normally, when you compare folders using the Find Differences command BBEdit presents you with three lists: one list of the items that are in the first folder but not in the second folder, another list of the items that are in the second folder but not in the first one, and another list of the items that appear in both folders.

The list of items that appear in both folders generally displays a bullet next to items that are not identical. For example, if you have an archived mail folder that you are comparing against a current mail folder, mailbox files that appear in both the old and new file will all be listed together; however, if there have been any changes to the contents of particular mailbox files, the changed mailbox files will be listed with bullets next to them.

If you are comparing very large folders, however, the list of common items can be extremely long, making the flagged items hard to find. When you deselect the List Identical Files checkbox, BBEdit will list only the flagged items (the ones that have been changed) in the list of items that appear in both folders.

Flatten Hierarchies

Normally, BBEdit retains the hierarchy of the files being compared in a folder. In other words, when comparing folders, it looks in each subfolder of the first folder you select and tries to match it with a file of the same name in the same subfolder of the second folder, and so on down for all subfolders. If you choose Flatten Hierarchies, BBEdit considers the files in the folders as a single flat list, allowing a file in one folder to match a file of the same name in the other folder, regardless of whether they are in the same subfolder in both hierarchies.

Compare Projector States

If you mark this checkbox, BBEdit will flag files that have different Projector information (CKID resources) even if they are otherwise identical. Files that differ in their Projector states are underlined in the results list.

Only List Text Files

If this option is set, BBEdit does not list non-text files when comparing folders.

Skip (…) Folders

If this option is set, BBEdit skips subfolders whose names are enclosed in parentheses when comparing folders.

Use File Filter

File Filters allow you to select files for comparison with great precision. If either file in a compared pair matches the filter, the files are eligible for comparison; if *neither* file matches the filter, the files will not be compared. See Chapter 7, “Searching,” for more information on creating, editing, and using file filters.

new in 7.0 When comparing folders with the Find Differences command, BBEdit applies any specified file filter to the contents of the resulting "Only in new" and "Only in old" lists, so that only those files that match the filter criteria will appear in the lists.

Previous versions of BBEdit had an "Only Compare if Contents…" field in the Find Differences dialog. This option has been superseded by the ability to apply File Filters, which can perform much more powerful queries on the contents of a file.

Using the Spelling Checker

The Check Spelling command in the Text menu lets you check the spelling of the text in your documents. You can use BBEdit's built-in spelling checker or use an external spelling checker that supports Apple's Word Services Suite.

Note BBEdit's spelling checker is only capable of working with MacRoman text, so the Check Spelling command will be disabled for non-Roman documents if the built-in checker is selected. If you are using a Word Services spelling checker that is capable of handling non-Roman content, it should work normally.

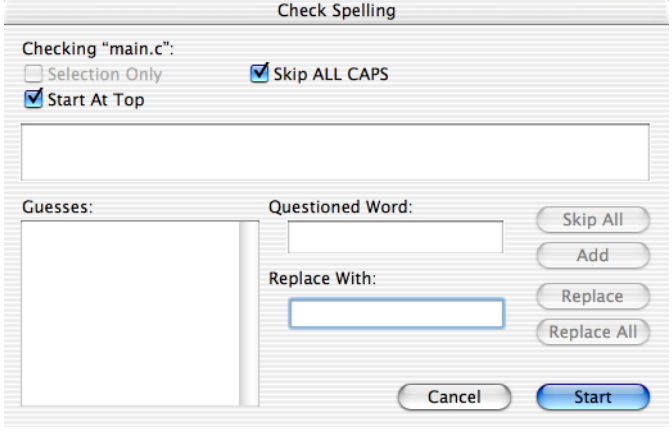
Checking Spelling

The Check Spelling command in the Text menu opens either BBEdit's built-in spelling checker or an external spelling checker to check the spelling of words in the active document. This section describes the built-in spelling checker. To learn how to configure BBEdit to use an external spelling checker, see "Using an External Spelling Checker" later in this chapter.

The checker matches each word in the document against the words in its dictionaries. If a word is not in a dictionary, the spelling checker offers a suggested correction. Sometimes the questioned word may actually be spelled correctly; in those cases, you can add the word to the User Dictionary or you can skip the word.

1 Choose the Check Spelling command from the Text menu.

BBEdit opens the Check Spelling dialog box.



2 Set spelling options.

Select Selection Only to limit spelling checking to the selected text. Select Start At Top to check from the beginning of the text; otherwise, BBEdit checks from the insertion point to the end of the document. Select Skip ALL CAPS to avoid checking words consisting of only capital letters. (Note that these settings persist across runs of the application.)

3 Click Start to begin checking.

BBEdit scans the text. Words that are not in a dictionary appear in the Questioned Word text field. The text box in the middle of the dialog shows the questioned word in context.

BBEdit lists guesses for the questioned word in the Guesses list box. The first one appears in the Replace With box.

4 If the Questioned Word is a misspelled word, choose the correct word from the Guesses list or type it yourself in the Replace With box.

You can click the Questioned Word box to copy it to the Replace With box, and then make the correction in the Replace With box. This technique is useful if the questioned word is only slightly misspelled and the correct word is not in the Guesses list.

5 Click one of the buttons along the right side of the dialog box to handle the questioned word.

Click Skip All to ignore every instance of the questioned word, without adding it to the User Dictionary.

Click Add to add the questioned word to the User Dictionary.

Click Replace to replace this instance of the questioned word with the text in the Replace With text field.

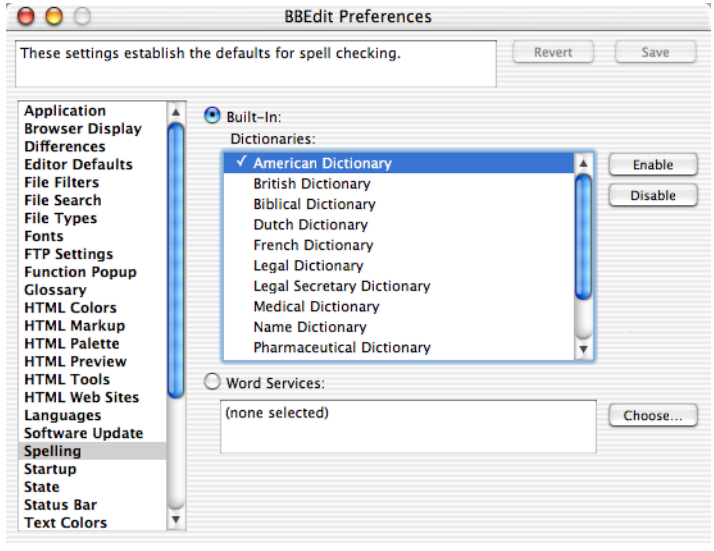
Click Replace All to replace every instance of the questioned word with the text in the Replace With text field.

Click Skip to ignore this instance of the questioned word.

Selecting Active Dictionaries

BBEdit uses the American English dictionary by default. However, you can use multiple dictionaries at a time. To configure the built-in spelling checker to use additional dictionaries:

1 **Open the Preferences window (by choosing Preferences from the BBEdit menu on Mac OS X, or from the Edit menu on Mac OS 9) and select the Spelling panel.**



2 **Make sure the Built-In option is selected.**

3 **Select a dictionary and click the Enable button.**

To stop using a dictionary, select it in the list and click Disable.

Editing the User Dictionary

When you use the Add button in the Check Spelling dialog box to add the questioned word to your personal dictionary, the spelling checker adds it to the User Dictionary file in the BBEdit Preferences folder.

While the Add button is adequate for adding a few words, it would be tedious to use this option to add dozens or hundreds of words to the User Dictionary. Thus, the User Dictionary is stored as a BBEdit text file that you can edit yourself.

The file begins with a "magic" number that lets the spelling checker verify that the file is a dictionary. Also, it has Unix line breaks, and each word you enter must be placed on a separate line. If you just edit the file and save it, BBEdit will do the right thing. We do not recommend that you try to create a user dictionary from scratch.

WARNING Do not change or remove the magic number, or your User Dictionary will no longer be recognized by the spelling checker.

Using an External Spelling Checker

You can use any external spelling checker that supports Apple's Word Services Suite. To set up an external spelling checker:

1. **Open the Preferences window (by choosing Preferences from the BBEdit menu on Mac OS X, or from the Edit menu on Mac OS 9) and select the Spelling panel.**
2. **Select the Word Services option.**
3. **Click the Choose button and select an external spell checker.**

   You can also drag the icon of the spelling checker from the Finder to the path box to the left of the Choose button.

To start the external spelling checker, use the Check Spelling command just as you would for the built-in spelling checker. See the documentation for your spelling checker for details on how to use it once it has been invoked.

CHAPTER

5 Working with International Text

This chapter describes BBEdit's support for international text formats, including Unicode. If you need to work with such text, we strongly recommend that you read through this entire chapter to familiarize yourself with how BBEdit handles it.

In this chapter

An International Text Primer **81**
How Script Systems Work. **82**
Using Script Systems **83**
Script Systems in BBEdit – 84
Unicode **85**
Saving Unicode Files – 85 • *Opening Unicode Files* – 86

An International Text Primer

Starting with version 6.0, BBEdit became fully compatible with left-to-right non-Roman script systems. (English and most other European languages use Roman characters—the kind of letters you are reading now.)

Inside your Macintosh, text is stored as a series of numbers, just like graphics, sound, and every other type of information. A standard called ASCII (the American Standard Code for Information Interchange) defines what numbers are used for each of the letters, punctuation marks, and other symbols you can type on your computer. As its name implies, ASCII is intended for use with United States English; it has a dollar sign instead of the pound sign you would use in Britain, for instance, and none of the accented letters you would use in Spanish or French.

However, since ASCII defines only 128 codes, and a byte can hold 256 different codes, Apple uses the remaining values to store characters occurring in other European languages that use the same basic alphabet as English, as well as symbols frequently needed by American and European users. The extended Macintosh character set includes the various accented characters used by languages such as Spanish, French, and German, so only one character set is needed to represent text written in any of these languages. This character set is often referred to as "Macintosh ASCII" (technically a misnomer, because ASCII explicitly leaves the extra codes undefined) or "MacRoman." Although the Romans did not have all the letters used in these modern languages, our letters evolved from theirs, so the kind of alphabet used to write English and these other languages is referred to as "Roman."

Of course, many languages do not use the Roman alphabet. Russian is written using an alphabet called Cyrillic, which has more in common with Greek than with anything else. (MacRoman does have Greek letters in it, however, so you can write Greek text on a Macintosh without switching alphabets.) Hebrew and Arabic both have alphabets of their own, and to make things even more confusing, text in these languages is written right-to-left, rather than the Roman-derived left-to-right.

Furthermore, Asian languages (such as Chinese and Japanese) often have a different character for each word or concept. This means, first of all, that you cannot fit all the different characters you need for a language in a single byte anymore. A byte can only hold a single number with a value from 0 to 255. Plenty for English, plenty even for many other languages, but unworkable for ideographic languages with thousands of distinct characters. So, to support these languages, one needs to use two bytes to store each character. This means that all text display and manipulation features of all software have to be revised to support text in which characters are stored as more than one byte. It also means that the computer has to provide some way for users to type text without requiring a keyboard with thousands of keys.

Starting with Mac OS 8.5, Apple included the ability to view text in all these different languages with the operating system (this package was called "Multilingual Internet Access" and had to be custom-installed). With Mac OS 9, Apple began including all the available language kits with the OS as custom installations, and Mac OS X installs international text support by default, so now every Macintosh user either already has, or can add, this capability if they want it.

This only works in applications that support international text, of course. If your text editor assumes that every character fits in a single byte, simple tasks like exchanging two adjacent characters can actually wreak havoc on two-byte text. BBEdit now fully supports editing and processing of left-to-right international text. (Right-to-left systems such as Hebrew and Arabic are not currently supported.)

How Script Systems Work

Apple uses the term "script systems" or just "scripts" to refer to all the various attributes used by a particular way of writing. In other parts of this manual, we often use "script" to refer to a sequence of instructions written in the AppleScript scripting language (or another language, such as Frontier, Perl, or JavaScript). In this chapter, we use "script" specifically to refer to a writing system.

Among other things, a script defines:

- The alphabet (actual character shapes) or ideograms used, in the form of one or more TrueType fonts. (This is why the TrueType standard allows fonts to contain thousands of different characters.)
- The direction of writing.
- One or more keyboard layouts for allowing input of text, if the writing system being used has few enough letters to reasonably fit on a standard keyboard.

- If the language being supported requires many different characters, the script system also defines an input method—a special floating window or other software help that allows you to specify the symbol you want phonetically, or from a short list of symbols that sound like what you typed.
- Routines that programmers can call to display, alphabetize, and otherwise manipulate text in the selected writing system.

Just as the Macintosh allows you to use different type styles and fonts in a single document, a program that supports international text may let you use these different writing systems in a single document. The computer keeps track of which text is displayed in which scripts and automatically selects an appropriate font to display each script. When you copy and paste text, information on what script it is in comes with it. In short, it works just the way you think it should.

When writing in other languages, it is fairly common to use an English term where no native word is available, so most scripts also include a Roman character set to allow users to type the occasional English word without having to constantly switch back and forth between the Roman script and the international one. (This is especially fortunate for Web design, because all HTML tags are in English, although of course the contents of Web pages need not be.)

The part of the Mac OS that allows applications to handle text in different scripts is called WorldScript. Thus, you will often see applications referred to as "WorldScript-aware" or "WorldScript-savvy."

Using Script Systems

Throughout this section, we will assume you are using a U.S. English (or another Roman-based) version of the Mac OS. If you are not, you probably already know how all this works, because you already use it all the time.

Once you have installed one or more Language Kits on your computer, or (on Mac OS X) if you have enabled additional Input menu options in the International section of the System Preferences, you will see a new menu in the menu bar. This menu allows you to change keyboard layouts or script systems as you work.

Actually, even if you have never used a non-Roman script system before, you may still have used this menu, if you have ever chosen an alternate keyboard layout such as Dvorak, or a keyboard layout for a Roman language such as French. However, since the Roman script is suitable for several languages, choosing one of these keyboard layouts still leaves you in the Roman script. If you have only the Roman script installed, it is possible to turn off the menu by choosing only one layout in the Keyboard control panel or the International section of the System Preferences. However, once you install additional script systems, this menu will always appear, even if you have chosen only one keyboard layout for use with the Roman script.

To start entering text in another script, you simply choose it from the menu. The icon for the associated script system appears in the menu bar in place of the American flag (or the icon for your usual Roman keyboard layout). Scripts that do not have very many characters have keyboard layouts that map each key on your keyboard to a character in the appropriate alphabet; you can open the Key Caps desk accessory to see what keys you must press to generate each character.

If you are using a script with its own input method, like Chinese or Japanese, another menu appears to the left of the script menu to allow you to control the input method and other text encoding options. You can find more information about the input methods for installed multi-byte script systems in the Mac OS Help Center.

Script Systems in BBEdit

As a text editor, BBEdit supports only one font per document window. To begin writing text in a supported non-Roman script, simply choose an appropriate font from the Font menu (or from the Font & Tabs dialog, which you can open from the Text menu).

If you have turned off Font and Keyboard Synchronization (in the Keyboard control panel on Mac OS 9, or in the Options dialog of the International section of the System Preferences on Mac OS X), you will also need to select the correct input method from the keyboard menu. (We recommend leaving this option on, so that BBEdit can automatically switch to the correct input method when you change document windows.)

Note On Mac OS X, BBEdit 7.0 supports use of the Roman, Japanese, Traditional Chinese, Korean, Cyrillic, Simplified Chinese, and Central European scripts.

Although BBEdit can display and edit text in only one script system at a time, keep in mind that many script systems allow entry of Roman text without switching scripts.

It is also possible to create text files that contain text in more than one script with BBEdit, although not all the text will be readable at the same time. Simply change the font and input method as necessary and begin entering text in the new script. The text you have already entered will appear as gibberish, but it is still there and will be saved correctly. If you want to view or edit that text, switch back to the first font and script system (the newly entered text will become gibberish). (Naturally, whatever application you want to use such text files with will need to provide some way of defining which script systems should be used for which text.)

You can use international text throughout BBEdit—for example, in the Find & Replace dialog, in the HTML Tools, and everywhere else you would use regular Roman text. Likewise, BBEdit will provide the necessary style information so that if you copy and paste, or drag and drop, international text into another application, that application will have enough information to handle the text correctly (assuming it is capable of doing so).

BBEdit remembers the script system used in a document when you save it, so the next time you open it, you will not need to choose the font. However, files that do not have this stored information, such as those you download from the Internet, may not be readable until you choose an appropriate font and script for them.

Note When saving a multi-byte document, BBEdit will write out a 'styl' resource in the document's resource fork. This ensures compatibility with applications that do not know how to interpret the MPW state resource (or which otherwise cannot properly select the document font on their own).

When performing a multi-byte search, BBEdit respects the saved information about each file's script system if the file has it. If the file does not contain any information about its script system, and the preference for Allow File Script Guessing is set (in the Text Search panel), BBEdit assumes it is in the same script as the text you are searching for.

Unicode

The various script systems Apple introduced to handle non-Roman scripts served well enough for years. However, with the increased rate of data exchange brought about by the growth of computer networks, the shortcomings of trying to deal with the hundreds of extant character encoding systems became clear. This led to the development of a new international standard for character encoding, dubbed Unicode.

Like existing Asian encodings, Unicode uses two bytes to represent each character of text. However, as the name implies, Unicode is a single code that contains characters from Roman, Cyrillic, Asian, Middle Eastern, and various other scripts. (Asian languages get short shrift, unfortunately. There simply is not room for all the characters of Korean, Japanese, and Chinese in a single two-byte code. Only the most frequently used characters from each are included. Fortunately, most speakers of Asian languages do not use anywhere near all the symbols—which are, remember, words and not letters—available in their language.)

Apple began supporting Unicode in Mac OS 8.1, and all versions of Mac OS and Mac OS X include this capability.

For obtaining additional background information or more details on Unicode, the Unicode Consortium web site is the best place to start.

```
http://www.unicode.org/
```

Saving Unicode Files

BBEdit lets you save documents that use character set encodings other than Mac Roman, even multi-byte character sets. When saving a file, you can choose to save text composed in any script with any encoding. In addition to the standard character set encodings, BBEdit also lets you save the files in a variety of plain Unicode files:

- UTF-8
- UTF-8, no BOM
- UTF-16
- UTF-16, no BOM
- UTF-16, byte-swapped
- UTF-16, byte-swapped, no BOM

Here are details about what each of the above options means:

- UTF-8: UTF-8 encoding is a more compact variant of Unicode that uses 8-bit tokens where possible to encode frequently used sequences from the file. (This format makes it easier to view and edit content in non-Unicode-aware editors.)

- UTF-16: UTF-16 encoding always uses 16-bit tokens.
- no BOM: When saving Unicode files, you should always include a byte-order mark (BOM) so that the reading application knows what byte order the file's data is in. For maximum compatibility, the BOM should be used whenever possible. Use one of the "no BOM" options only if there is a specific reason to do so, such as providing compatibility with software that malfunctions when a BOM is present. (For purposes of recognition when you use this option, the UTF-16 BOM is FEFF, and the UTF-8 BOM is EFBBBF.)
- byte-swapped: Since UTF-16 uses two bytes to represent each character, this leaves the question of which of the two bytes comes first—whether it is "little-endian" or "big-endian." By default, BBEdit writes UTF-16 big-endian (the standard). By choosing one of the "byte-swapped" options, you can write little-endian files instead, which some Windows software requires.

Files saved as Unicode from BBEdit are given a type of 'utxt'—the standard for Unicode text files on the Mac. UTF-8 files are given a type of 'TEXT' for compatibility with other applications; however, BBEdit will also recognize such files with type 'UTF8'.

Opening Unicode Files

When opening files, BBEdit will ordinarily determine the format of a file based on its file type and content, and automatically process Macintosh text, Unicode, and UTF-8. However, some files are structured such that BBEdit is unable to correctly determine their format based on their type or contents. The cases that we know of are:

- UTF-8 files whose type is 'TEXT' and which lack a byte-order mark. (If a UTF-8 file is of type 'TEXT' but has a byte-order mark, it will be correctly interpreted as UTF-8.)
- Byte-swapped Unicode files which were written without a byte-order mark (usually by broken Windows software);
- Unicode files whose type is 'TEXT' (instead of the Macintosh standard 'utxt') *and* which lack a byte-order mark. (If a UTF-16 file lacks a BOM but is of type 'utxt', BBEdit will treat it as big-endian Unicode.)

If you know that a file you are trying to open is in Unicode but it displays as gibberish on your screen, close its window without saving. Then try reopening the file, using the Open As pop-up menu in the Open dialog to specify whether to treat the file as Unicode, byte-swapped (little-endian) Unicode, or UTF-8.

When opening a malformed UTF-8 document, BBEdit will present an alert to warn you. When such a file is encountered during multi-file searching, a warning will be logged.

CHAPTER

6

Working with Windows

This chapter describes the commands in the Window menu. These commands allow you to arrange and access editing and browser windows quickly, and also to access BBEdit's extensive set of tool palettes and floating windows.

In this chapter

Window Menu **87**
Minimize Window **87**
Bring All to Front **88**
Palettes **88**
ASCII Table – 88 • *Glossary* – 88 • *Plug-In Tools* – 89
Scripts – 89 • *Stationery* – 89 • *Windows* – 89
HTML Markup Tools – 90
Perl/Unix Tools, Filters, and Scripts – 90
Arrange **91**
Get Info **92**
Super Get Info **92**
Reveal in Finder **92**
Zoom **93**
Send to Back **93**
Exchange with Next **93**
Synchro Scrolling **93**
Window Names **93**

Window Menu

The Window menu provides easy, centralized access to all of BBEdit's tool palettes and floating windows, in addition to offering commands that you can use to access and organize editing and results windows on screen.

BBEdit also offers several preference options (in the Applications panel of the Preferences window) so that you have greater control over the listing of open documents. You can choose whether items are grouped by window kind, or are all listed together without dividers. You can also elect to sort windows by name or in order of creation. Please refer to Chapter 10 for additional details.

Note The Quick Find command, once located in the Window menu, is now in the Search menu. See Chapter 7, "Searching," for details.

Minimize Window

This command puts the frontmost window into the Mac OS X Dock. Click the window icon in the Dock to restore the window. Hold down the Option key and this command will become Minimize All Windows. If you are not using Mac OS X, this command will not be available in the menu.

Bring All to Front

In Mac OS 9, each application's windows are all grouped together in a single layer. In Mac OS X, windows from different applications can be interspersed. BBEdit's Bring All to Front command will bring all un-minimized BBEdit windows to the front. If you are not using Mac OS X, this command will not be available in the menu.

Palettes

The Palettes submenu provides quick access to all of BBEdit's numerous tool palettes and floating utility windows. In previous versions of BBEdit, the commands to access these items were scattered—the HTML Tools palettes were in the Markup menu, the AppleScript floating window in the Script menu, and so on. Choosing an item from this submenu toggles the visibility of the corresponding palette.

When moved or resized, palettes and floating windows now automatically "snap" to the edges of the screen and the edges of other palettes. You can override this behavior by holding down the Shift key while dragging or resizing.

ASCII Table

The ASCII Table command opens a floating window that contains the 127 entries of the ASCII character set plus all of the standard extended (8-bit) Macintosh character set (MacRoman). The decimal value for each character is displayed in the center column, while in the right-hand column, the character value is displayed in either hexadecimal "escape" format, or in URL-encoded format, based on the language mapping of the frontmost text window.

Depending on the modifier keys you hold down, the Insert button inserts the selected character in different formats:

Clicking Insert while holding…	Inserts in this format…
None	Escape code appropriate to the front window—for example, (\x69) or (%69)
Option	Decimal value—for example, (105)
Command	Literal character—for example, (i)

Note You can also double-click on a line in the ASCII table to insert the corresponding character or character code into the editing window.

Clicking the Show button in the ASCII Table window displays the ASCII value of the character to the right of the insertion point or the first character of the selection.

Glossary

BBEdit's powerful Glossary provides an easy way to store and access frequently used text of any sort. For details on using the Glossary, including its language-sensitive mode, please refer to Chapter 12.

Plug-In Tools

The Tools floating window displays a list of all the plug-ins in your BBEdit Plug-Ins folder. Any plug-ins you have installed will appear both in this Tool List window and in the Tools menu itself. See Chapter 15, "BBEdit Plug-Ins," for more information on installing plug-ins.

Scripts

The Scripts floating window displays all the currently installed OSA scripts in your BBEdit Scripts folder. In most cases, OSA scripts are all AppleScripts. See Chapter 13, "Scripting BBEdit," for information about using AppleScript with BBEdit.

Stationery

The Stationery List is a floating window that displays all the stationery pads you have placed inside the Stationery folder in the BBEdit Support folder. You can create a new document from any of these pads by double-clicking it in this list. Although the document created will have the content and all the state information from the stationery pad, it is a new untitled document separate from the stationery pad.

To create a stationery pad, click the Save As Stationery checkbox when saving the file from BBEdit. Alternately, any document can be changed into a stationery pad in the Finder by clicking the Stationery Pad checkbox in the document's Get Info window.

By default, items in the Stationery List are displayed in alphabetical order. However, you can force them to appear in any desired order by including any two characters followed by a right parenthesis at the beginning of their name. (For example "00)Web template" would sort before "01)HTML Template.") For such files, the first three characters are not displayed in BBEdit. You can also insert a divider by including an empty folder ending with the string "-***". (The folder can be named anything, so it sorts where you want it.) These conventions are the same as those used by the utilities FinderPop and OtherMenu.

Note In the Glossary, Tools, Stationery, or any of the Scripts floating windows, the Set Key button allows you to assign key equivalents to any item contained in that window. You can use combinations of the Command, Shift, Option, and Control keys, plus any single other key, to create such equivalents, except that any equivalent must contain either the Command or Control keys (or both). You can also map Function keys directly to items, with or without the use of a modifier.

Windows

The Windows floating window displays the names of all open windows, ordered either by name, by creation order, or by window kind, as determined by the settings your Application preference panel (see Chapter 10). You can open a file by dragging its icon from the Finder or from a file group window into the Windows window.

Document windows, which correspond to text files, have a document icon next to them; display windows, such as browsers and search results windows, do not. A solid diamond to the left of a window's name means that the window's contents have been modified and have not yet been saved, while a hollow diamond indicates that the window's state has been modified but not yet saved.

To bring any window to the front, double-click its name in the Windows window. The buttons at the top of the window perform Save, Close, or Print commands on the selected windows. Holding down the Option key changes these buttons to Save All, Close All, and Print All, which apply to all listed windows for which the given command is possible.

new in 7.0 "Hovering" the mouse over a window name displays a tool tip showing the full window title; this is useful for names that have been truncated with ellipses (…) because they are too long to fit within the width of the window. If you hold down the Option key, the tool tip will appear instantly, with no hovering delay. Holding down the Command key displays the full pathname for document windows (or other relevant windows such as disk browsers and FTP browsers).

HTML Markup Tools

The main HTML Markup Tools palette is a comprehensive listing of BBEdit's numerous HTML markup commands. See "HTML Tools Palette" on page 217 in Chapter 11 for details on what these commands do. You can choose which commands appear on the main HTML Tools Palette in the HTML Palette panel of the Preferences window.

Several other HTML palettes are available, each with a specific focus. These include Block, CSS, Entities, Font Style, Forms, Inline, Phrase, Tables, Utilities, and Web Safe Colors. For more information on these tools, please see Chapter 11, "BBEdit HTML Tools."

Perl/Unix Tools, Filters, and Scripts

On Mac OS 9, BBEdit offers integration with MacPerl, the classic Mac OS port of the Perl programming language. If you have a copy of MacPerl installed on your system (and the Perl Integration checkbox is selected in the Tools panel of the Preferences window), you will see Perl Tools, Perl Filters, and Perl Scripts menu items available at the bottom of the Palettes submenu. MacPerl is freely available; for more information, see the MacPerl web site.

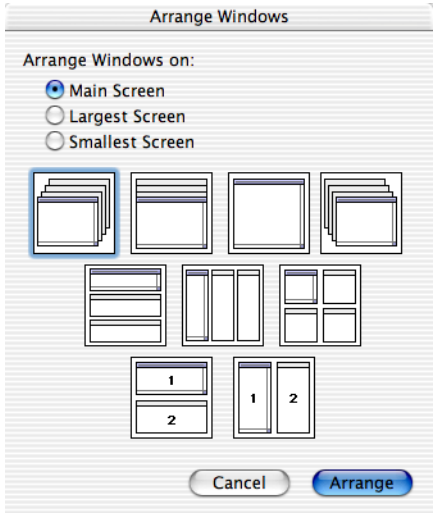
```
http://www.macperl.com/
```

On Mac OS X, BBEdit integrates directly with any Unix scripting language, including Perl, shell scripts, and any other scripting languages you install (such as Python or Ruby). On Mac OS X, these menu items are named Unix Scripting Tools, Unix Filters, and Unix Scripts.

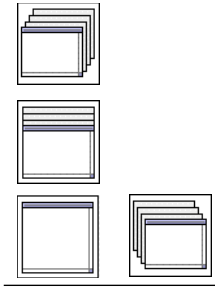
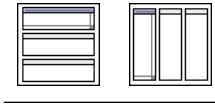
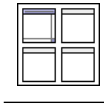
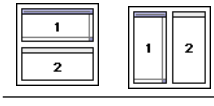
The Tools palette contains a subset of the commands available in the MacPerl/Shebang menu. The Filters palette displays shell scripts that read the selection of the current document window as STDIN and replace the selection with STDOUT. For more information on these tools, see Chapter 14, "Working with Development Tools."

Arrange

The Arrange command gives you several ways to organize BBEdit windows. When you choose the Arrange command, BBEdit opens the Arrange Windows dialog box.



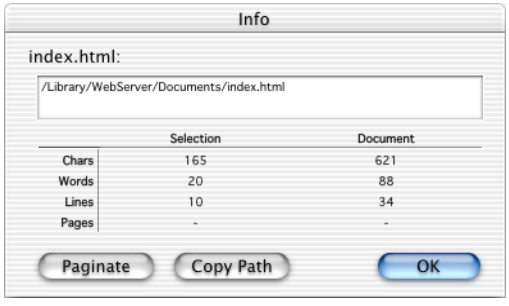
The radio buttons at the top of the dialog specify which screen the windows will be arranged on. You can choose the main screen, the largest screen, or the smallest screen.

Icon	Description
	Stacks every window so that some part is visible no matter which window is frontmost. If you select the Leave Room for Finder options in the Windows section of the Preferences window, BBEdit leaves room along the right side or bottom of the screen for Finder icons. BBEdit offers four different ways to stack windows: down and to the left, straight down, atop, and down and to the right. These are the top four choices in the dialog.
	BBEdit tiles the windows in two or three rows (or columns). If you have more than three windows open, BBEdit stacks additional windows behind the three front windows.
	BBEdit figures out how many rows and columns it needs to tile windows. The larger your screen, the more rows and columns BBEdit uses. The windows are never narrower than half of a classic Macintosh screen.
	BBEdit tiles the front two window horizontally or vertically and stacks any additional windows behind the two front windows.

Note To arrange the windows using the same settings as the last time you used this command, hold down the Option key as you choose Arrange from the Window menu.

Get Info

The Get Info command displays a dialog box that lists the number of characters, words, line, and pages in the selected text and in the document. Using this command is the same as clicking the info button in the status bar.



To find out how many pages the document will take to print, click the Paginate button. To put the full path to the file on the clipboard, click the Copy Path button.

Super Get Info

If you hold down the Option key while pulling down the Window menu, the Get Info command becomes Super Get Info. This command provides integration with Super Get Info, Bare Bones Software's Mac OS X file info utility. If you choose it, BBEdit will ask Super Get Info to open an info window on the file associated with the current editing window.

If the frontmost window is not an editing window, or does not have an associated file on disk, this command will be disabled.

The Super Get Info command is only available if:

- you are running on Mac OS X;
- you have Super Get Info installed on your computer;

Super Get Info is a utility designed to serve as a supplement for the Mac OS X Finder's Show Info command. Super Get Info allows you to open more than one info window at a time; view and edit the Macintosh type and creator codes associated with a file; view and edit the Unix owner, group, and permission settings associated with a file or folder; and much more. For more information, or to download a free demo version, visit our web site.

```
http://www.barebones.com/products/supergetinfo.html
```

Reveal in Finder

If the active window is a document that is saved in a file, the Reveal in Finder command opens the Finder window that contains this file. Using this command is the same as clicking (without dragging) the document icon button in the status bar. (The actual icon in the icon bar is the same as the document's icon in the Finder.)

If the selected text in a document is the name of a file, hold down the Option key as you open the File menu and choose the Reveal Selection command to have BBEdit open the Finder folder that contains that file.

Zoom

There is no longer a Zoom command in the Window menu, but the key equivalent Command-/ (which users of earlier versions of BBEdit may be accustomed to) still works. Zoom will produce the same effect as clicking a window's zoom box: it makes the active window larger if it is small, or returns it to its original size if it was previously enlarged by a Zoom command.

When zooming windows, BBEdit will move the window as little as possible (consistent with maximizing the window's size). This behavior is similar to what the Finder does when zooming a window. The "Move as Little as Possible" switch in the Windows preference panel controls this behavior; turning this switch off will revert the behavior to be the same as previous versions of BBEdit.

Send to Back

This command sends the front window behind all the other windows.

Exchange with Next

This command makes the second window the active window. Choose this command repeatedly to alternate between the front two windows.

Synchro Scrolling

When you have two or more windows open, Synchro Scrolling makes both files scroll when you scroll one. This feature is useful to look over two versions of the same file.

Window Names

The last items in the Window menu are the names of all the open documents, browsers, and other editing windows. Choose a window's name from this menu (or use its numbered Command key equivalent, if applicable) to bring that window to the front.

Tip You can also use the Windows floater to select windows quickly.

CHAPTER

7 Searching

This chapter describes BBEdit's powerful Find command, now enhanced with a flexible file filtering mechanism. It tells you how to search for text in the active window or within a set of files. BBEdit can also do advanced pattern, or grep, searching. To learn about pattern searching, you should read this chapter first and then read Chapter 8, "Searching with Grep."

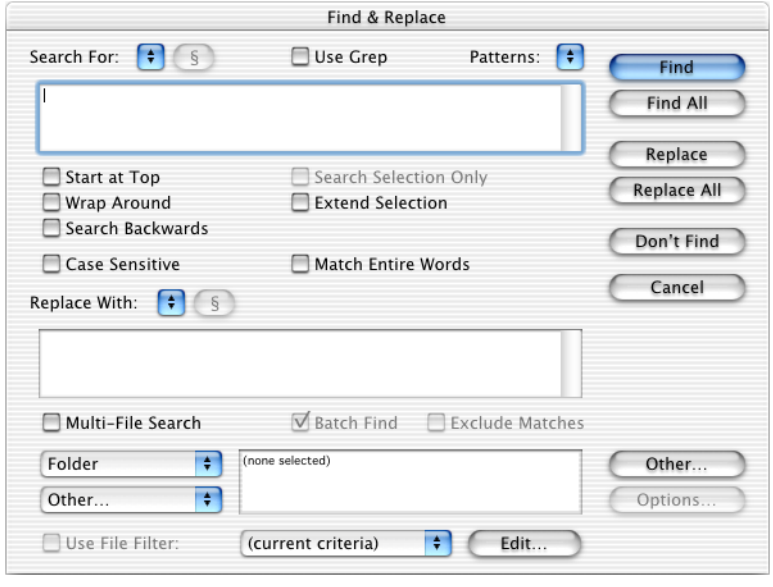
In this chapter

Basic Searching and Replacing **96**
Search Settings – 97 • *Search Field Input Script* – 99
Special Characters – 99
Multi-File Searching **99**
Multi-File Search Results: Batch Find – 101
Multi-File Search Results: File by File – 102
Specifying the Search Set – 103 • *Multi-File Search Options* – 106
File Filters – 107
Multi-File Replacing **109**
Replacing in Files with Projector CKIDs – 110
Quick Search. **111**
Search Menu Reference **112**
Find – 112 • *Quick Search* – 112 • *Find Again* – 112
Find Selection – 112 • *Enter Search/Replace String* – 112
Replace – 112 • *Replace All* – 113 • *Replace & Find Again* – 113
Find in Next File – 113 • *Open All Matches* – 113
Find & Replace All Matches – 113 • *Go to Line* – 113
Go to Center Line – 113 • *Go to Previous/Next Error* – 113
Go to Previous/Next Placeholder – 113 • *Find Differences* – 114
Apply to New – 114 • *Apply to Old* – 114 • *Compare Again* – 114
Find in Reference – 114 • *Find Definition* – 114

Basic Searching and Replacing

This section describes the basic steps for searching and replacing text in a window. Later sections in this chapter cover more advanced techniques. To search and replace text in the active window, follow these steps:

1 **Choose Find from the Search menu. BBEdit opens the Find & Replace dialog box.**



For now, disregard the bottom part of the dialog—the Multi-File Search checkbox and everything below it. The section "Multi-File Searching" later in this chapter discusses this part of the dialog box.

2 **Type the string you are looking for in the Search For text field.**

You can use special characters in the Search For text field to search for tabs, line breaks, or page breaks. See "Special Characters" later in this section.

BBEdit remembers the last 12 search terms you used since launching the application. If you are searching for something you recently searched for, you can choose it from the pop-up menu above the Search For field.

Click the § button to enter the document selection in the Search For field.

3 **Type the replace string (if any) in the Replace With text field.**

BBEdit also remembers the last 12 replace terms you used since launching the application. These appear in the pop-up menu above the Replace With field.

Click the § button to enter the document selection in the Replace With field.

4 **Mark any checkboxes in the middle part of the dialog box that you want to apply to your search.**

For more info about these options, see "Search Settings" later in this section.

5 **Click one of the buttons along the right side of the dialog box.**

Note The size of both the search and replace strings is limited only by available memory. However, the memory requirements for searching multi-byte text files are generally at least double those for single-byte text.

The following table explains what each of the buttons does.

This button…	Does this…
Find	Finds the first occurrence of the text in the active window. Shortcut: Cmd-F
Find All	Finds all the occurrences of the search string and displays the results in a search results window. Shortcut: Cmd-Opt-F
Replace	If there is a selection, replaces the current selection with the replace string. Otherwise, finds the first occurrence of the text in the active window after the current insertion point and replaces it with the replace string. Shortcut: Cmd-R
Replace All	Replaces every occurrence of the search string in the active window with the replace string. Shortcut: Cmd-Opt-R
Don't Find	Saves the settings of the Find & Replace dialog without doing a search. Shortcut: Cmd-D
Cancel	Does not do the search and restores the settings of the dialog box to their previous state. Shortcut: Cmd-.

BBEdit closes the Find & Replace dialog and then selects the search string in the active window if the search was successful. Once BBEdit finds your text, you can use the commands in the Search menu (see "Search Menu Reference" later in this chapter). The table below summarizes the most common commands you can use at this point.

This command…	Does this…
Find Again	Finds the next occurrence of the search string without displaying the Find & Replace dialog again. To reverse the search direction, hold down Shift.
Replace	Replaces the selection with the replace text
Replace All	Replaces all occurrences of the search string with the replace string.
Replace & Find Again	Replaces the selection with the replace string and looks for the search string again.

Search Settings

The checkboxes in the Find & Replace dialog let you control how BBEdit searches your document for the indicated text.

Note You can set the defaults for many of these settings in the Text Search section of the Preferences window.

Use Grep
When this checkbox is selected, BBEdit treats the search and replace strings as grep patterns. Otherwise, BBEdit searches the document for text that matches the search string as it appears literally, and will replace any matched text with the replace string. To learn more about pattern searching see Chapter 8, “Searching with Grep.”

Start at Top
When this checkbox is selected, BBEdit always starts searches from the beginning of the document. Choosing this option will disable the Wrap Around and Search Backwards settings.

Wrap Around
When this checkbox is selected, BBEdit continues searching from the beginning of the document if a match is not found (or from the end of the document if searching backwards). Otherwise, BBEdit stops searching when it reaches the end (or the beginning if searching backwards) of the file. Choosing this option will automatically disable Selection Only. (Unavailable if Start at Top is checked.)

When performing a Replace All with Wrap Around selected, the replace is transformed into “Start at Top” to allow for performance optimizations.

Search Backwards
When this checkbox is selected, BBEdit searches from the insertion point to the beginning of the file. Otherwise, BBEdit searches from the insertion point to the end of the file. (Unavailable if Start at Top is checked.)

Search Selection Only
When this checkbox is selected, BBEdit searches only the selected text. Otherwise, BBEdit searches the entire document. (Unavailable if Wrap Around or Start at Top is checked.)

Extend Selection
When this checkbox is selected, BBEdit extends the selection from the current insertion point to the end of the matched search string.

Case Sensitive
When this checkbox is selected, BBEdit treats upper- and lowercase letters as different letters. Otherwise, BBEdit treats upper- and lowercase letters as if they were the same.

Match Entire Words
When this checkbox is selected, BBEdit matches the search string only if it is surrounded in the document text by word-break characters (white space or punctuation). Otherwise, BBEdit matches the search string anywhere in the text.

Multi-File Search
When this checkbox is selected, BBEdit searches a set of files for the search string. See “Multi-File Searching” below to learn more about searching in several files.

Batch Find
When this checkbox is selected and you are doing a multi-file search, BBEdit collects all the matches into a search results window. To learn more about multi-file searching, see “Multi-File Searching” later in this chapter.

Exclude Matches

When this checkbox is selected and you are doing a multi-file search, BBEdit finds all the files that *do not* contain the search string rather than the files that do.

Search Field Input Script

The Find dialog matches the font used to the input method. For example, if you have Japanese installed or are on a Japanese localized system and Japanese is the selected input method, then the contents of the Search For and Replace With fields will be displayed using the Japanese font that you have selected in the Fonts panel of the preferences. When the selected input method is US, the designated Roman font will be used instead.

Special Characters

You can use the following special characters to search for line breaks and other non-printing characters, as well as hexadecimal escapes to search for any desired 8-bit character.

Character	Matches…
\r	line break (carriage return)
\n	Unix line break (line feed)
\t	tab
\f	page break (form feed)
\xNN	hexadecimal character code NN (for example, \x0D for CR)
\\	backslash (\)

The form of a hex escape is "\xNN", where "N" is any single hex digit [0-9,A-F]. The "x" may be upper or lower case. (You can use the ASCII Table in the Window menu to find the hex value for any 8-bit Macintosh character.) You can perform a literal search for any character, including a null, using this option. Malformed escapes are treated as literal strings.

Note In older versions of BBEdit, you could not perform a grep search for a null character (ASCII 0), even if it was escaped. This limitation was removed starting with BBEdit 6.5.

Multi-File Searching

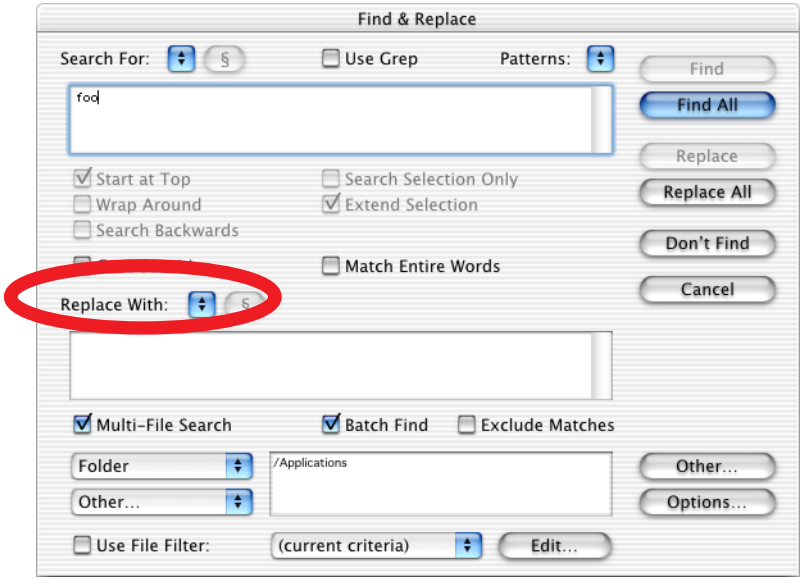
The only difference between single-file searching and multi-file searching is that in multi-file searching you need to specify the files to be searched. BBEdit gives you a great deal of flexibility in how to do this. You can search all the files in a given directory, in a file group, in open editing windows, or in a BBEdit results window.

For finer control, you can use BBEdit's advanced multi-criteria filtering options, or even identify a set of files to search via an OSA script.

To look for a string in several files, do the following steps:

1 **Choose Find from the Search menu to open the Find & Replace dialog box (if it is not already open).**

2 **Mark the Multi-File Search checkbox.**



3 **Type the string you are looking for in the Search For text field.**

4 **Type the replace string (if any) in the Replace With text field.**

Be sure to read the section "Multi-File Replacing" later in this chapter if you use the replacement features.

5 **Mark any checkboxes in the middle part of the dialog box that you want to apply to your search.**

To learn more about these options, see "Search Settings" earlier in this chapter.

6 **To have BBEdit collect the results of the search in a search results window, select the Batch Find checkbox. Otherwise, BBEdit searches for the search string file by file.**

7 **If you want BBEdit to find only files that *do not* contain the search string, select the Exclude Matches checkbox.**

8 **Use the controls in the bottom part of the dialog to specify the set of files to search.**

See "Specifying the Search Set" later in this chapter for more information.

9 **Click one of the buttons along the right side of the dialog box to begin the search.**

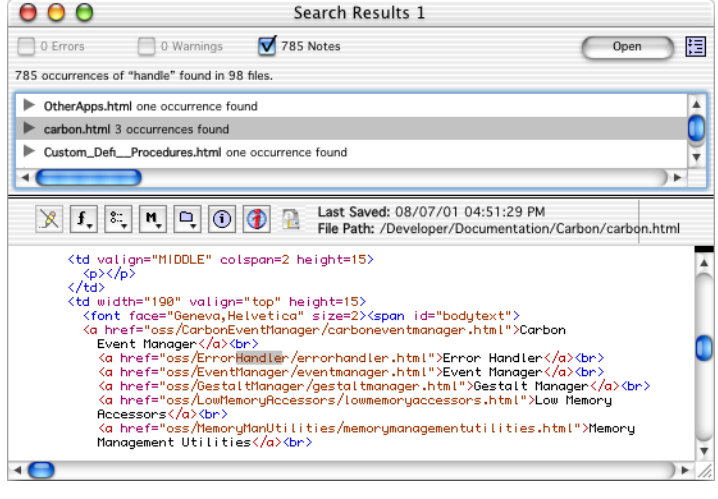
The table below tells you what each of the buttons does.

This button…	Does this…
Find	Batch Find on: Not available when the multi-file search option is selected. Batch Find off: Finds the first occurrence of the search string in the first file of the set.
Find All	Finds all the occurrences of the search string in all the files in the set. Batch Find on: BBEdit displays the results in a search results window. Batch Find off: BBEdit opens all files that contain matches.
Replace	Not available when the multi-file search option is selected.
Replace All	Finds all the occurrences of the search string in all the files in the set and replaces them with the replace string.
Don't Find	Saves the settings of the Find & Replace dialog without doing a search.
Cancel	Does not do the search and restores the settings of the dialog box.

If you selected the Batch Find option, read the following section "Multi-File Search Results: Batch Find." If you did not, read the section "Multi-File Search Results: File by File" below.

Multi-File Search Results: Batch Find

If you selected the Batch Find option, BBEdit displays every occurrence of the search string in the set of files searched using a search results browser.



The items at the top of the window tells you how many matches BBEdit found in the set of files you specified, as well as specifying whether there were any error conditions or warnings generated during the search. You can display or hide any combination of errors, warnings, and matches, by checking the appropriate options.

The middle panel lists each line that contains the matched text. (Depending on how you have configured BBEdit, this list may be a Finder-style hierarchical list, where each match in a file is listed under the file's name, or a flat list where each occurrence is simply displayed in order.) Every match is identified by file name and line number.

To see the contents of a file, click a line in the list of matched searches. The part of the file that contains the search string appears in the lower pane. You cannot edit text in a search results browser. To edit a file, double-click the line that contains the match you want to edit, and the specified file will open at the point of the associated match.

After you have opened a file, you can use the Find Again, Replace, Replace All, and Replace & Find Again commands in the Search menu to continue searching it, as if you had chosen a File by File search. See the next section for information on File by File searching.

Note You can use a search results window as the basis of another multi-file search. See "Specifying the Search Set" later in this chapter.

Multi-File Search Results: File by File

If you did not select the Batch Find option, BBEdit opens the first file that contains the search string. At that point you can use the commands in the Search menu to further control the search.

This command…	Does this…
Find Again	Finds the next occurrence of the search string within the same file. To search backwards, hold down the Shift key. BBEdit beeps if it cannot find any more occurrences of the search string in the current file. Use the Find in Next File command.
Replace	Replaces the selection with the replace string.
Replace All	Replaces all occurrences of the search string with the replace string within the current file.
Replace & Find Again	Replaces the selection with the replace string and looks for the search string again. BBEdit beeps if it cannot find any more occurrences of the search string. Use the Find in Next File command.
Find in Next File	Looks for the search string in the next file in the set of files to be searched.
Find & Replace All Matches	Replaces every occurrence of the search string with the replace string in each of the files being searched. See "Find & Replace All Matches" in the "Search Menu Reference" section at the end of this chapter.

Specifying the Search Set

When the Find & Replace dialog is expanded, the controls in the bottom part of the dialog let you specify which files BBEdit should consider in the multi-file search.

The pop-up menu just below the Multi-File Search checkbox controls which files BBEdit should search. You can search:

- the files in a given folder
- the list of files returned by an OSA script
- all open text documents
- the files listed in any results browser (such as a search results browser, an HTML syntax errors browser, or a compile errors browser)
- the files in a file group
- the files in a defined web site folder

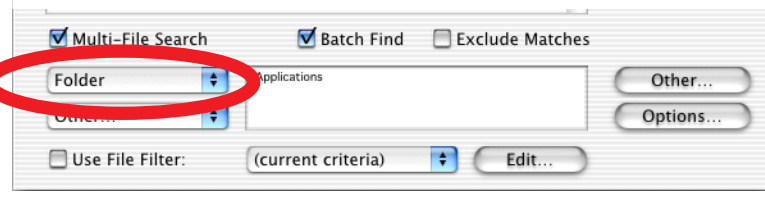
You can further restrict which of these files will be searched by applying a file filter. See "File Filters" on page 107 for more details.

Some of the other options change depending on what you select from this pop-up menu.

Searching the Files in a Folder

To search the files in a folder:

1 **Choose Folder from the pop-up menu.**



2 **Choose a folder from the second pop-up menu.**

This pop-up menu displays up to 12 recently used folders, as well as any favorite folders you have designated (see Chapter 2).

If the folder you want to search is not in the pop-up menu, choose Other (or click the Other button at the right of the dialog) and select the folder using the resulting Choose a Folder dialog. Hold down the Option key while navigating the dialog to display

You can also drag a folder from the Finder directly into the central path box where the path of the chosen folder is displayed.

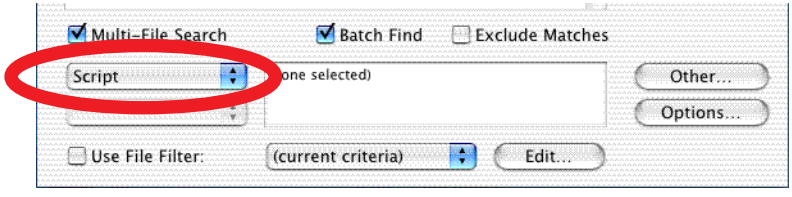
new in 7.0 On Mac OS X, the Choose a Folder dialog will display any packages it encounters as folders (rather than just as single files, the way they appear in the Finder). This allows you to navigate their internal structure just as you would any other folder. Similarly, you can drag a package from the Finder into the path box in the Find & Replace dialog and it will be treated as a true folder rather than as a single file.

3 **To search folders within the folder you chose, click the Options button and select the Search Nested Folders option in the Multi-File Search Options dialog.**

You can also choose to skip any folders whose names are enclosed in parentheses here by selecting the Skip (…) Folders option, and you can specify whether to search all files or only text files.

Searching with a Script

To specify the set of files to be searched using a compiled OSA script, choose Script from the pop-up menu; then click the Other button and select the desired script, or drag the script file into the pathname box next to the pop-up menu.



The script should return a list of the files to be searched. This provides great flexibility, since an OSA script can do pretty much anything it wants to generate a list.

When calling the script, BBEdit will first try a handler named MultiFileSearch; if there is no such handler, it will call the script's run handler.

Here is a very simple example script:

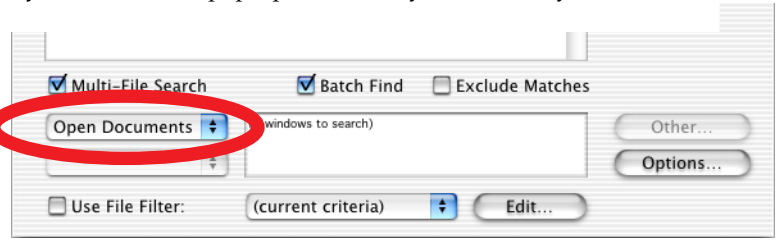
```
on MultiFileSearch
    -- note that this requires the "BB Commands" OSAX
    return folder listing of alias "Projects:BBEdit:files:" ¬
        only returning files of type {"TEXT"} with recursion
end MultiFileSearch

on run
    -- you could do something different here in case
    -- the script was run manually by the user
end run
```

Of course, you do not have to use the BB Commands OSAX to generate file lists; any other scripting tool which can produce the same type of output will work fine.

Searching All Open Documents

You can limit the set of files to be searched to the open editing windows. One advantage of this kind of search is that you can search windows that have not yet been saved to a file.

To search all the open windows, choose Open Documents from the pop-up menu. The display box next to the pop-up menu tells you how many windows will be searched.

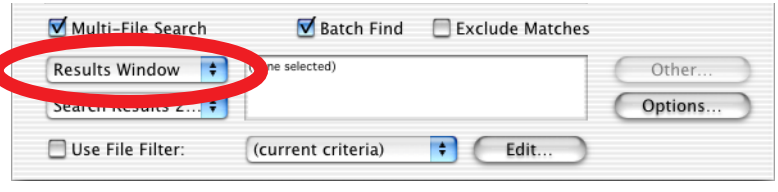


Searching the Results of a Previous Multi-File Search

If a multi-file search finds many files that contain your search string, you may want to narrow the search. You can do this if you selected the Batch Find option to do the initial search and the results are in a search results window.

To narrow a search based on the results of an earlier search:

1 **Choose Results Window from the pop-up menu.**



2 **Choose the desired search results window from the second pop-up menu.**

The second pop-up menu defaults to the frontmost search results window. If you have more than one such window open, you can choose another from the menu.

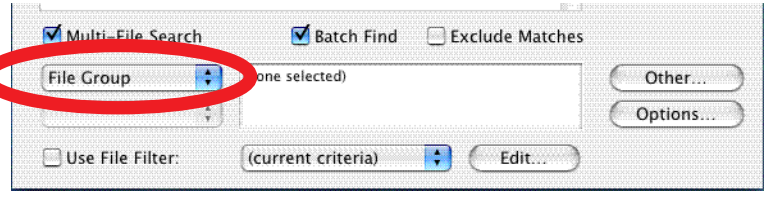
Note You can search the list of files presented in any results browser, not just search results browsers.

Searching the Files in a File Group

If the files you are working with are all included in a BBEdit file group, you can limit the multi-file search to the files in the group.

To search the files in a file group:

1 **Choose File Group from the pop-up menu.**



2 **Choose the group from the second pop-up menu.**

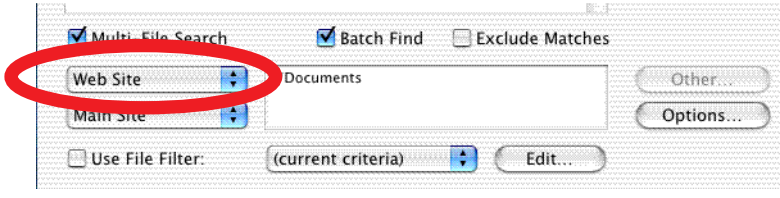
This menu lists all open file groups. To search in a file group that is not open, click the Other button on the right-hand side of the Find & Replace dialog, and select the desired file group using the standard Open dialog.

Searching the Files on a Web Site

new in 7.0 You can limit your multi-file search to the files for a specific web site folder as defined in the HTML Web Sites preference panel.

To search the files in a web site folder:

1 **Choose Web Site from the pop-up menu.**

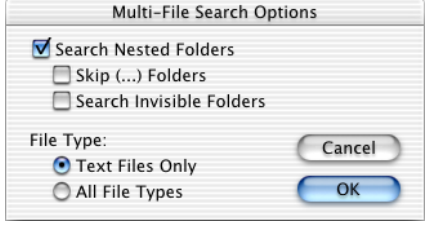


2 **Choose the site from the second pop-up menu.**

This menu lists all of the local site root and "Templates & Includes" folders that you have specified for the web sites in your HTML Web Sites preference panel. If you have not designated such a folder for a site, the site name appears dimmed in the menu and cannot be selected.

Multi-File Search Options

Click the Options button to display the Multi-File Search Options dialog, shown here.



To search all the files in subfolders of the selected folder, mark the Search Nested Folders checkbox. The Skip (…) Folders checkbox skips folders whose names are enclosed in parentheses. The "Search Invisible Folders" checkbox allows you to search inside invisible folders.

You can also choose to search only text files or to search all file types. If you have graphics or other types of files in the search set, it may be a good idea to restrict the search to only text files. This setting is in addition to any file filter (see next section) and is in fact applied *before* the filter.

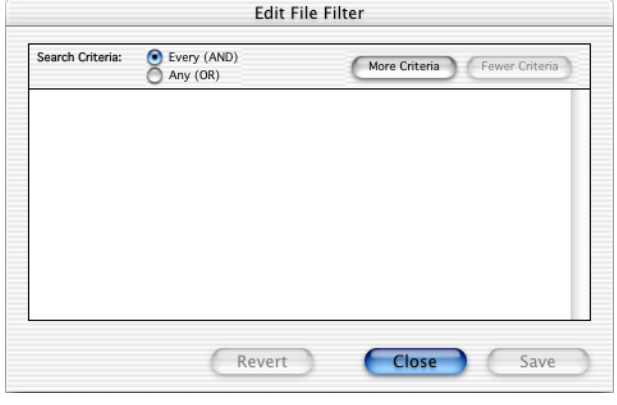
File Filters

If you do not want to search every file in the set you selected, but want to include only those that meet certain criteria (such as those created on a certain date, or only those created by BBEdit and not some other program, or those that are C source code), you can use a file filter. Mark the Use File Filter checkbox and then choose the desired file filter from the Filters pop-up menu. If none of the filters you have already defined meets your needs, you can define a new one, or create a temporary filter.

Note The process of creating and managing file filters has changed from its original incarnation in BBEdit 6.0. If you use file filters and are not already familiar with this feature from BBEdit 6.5, we suggest you read through this section again.

New Filter

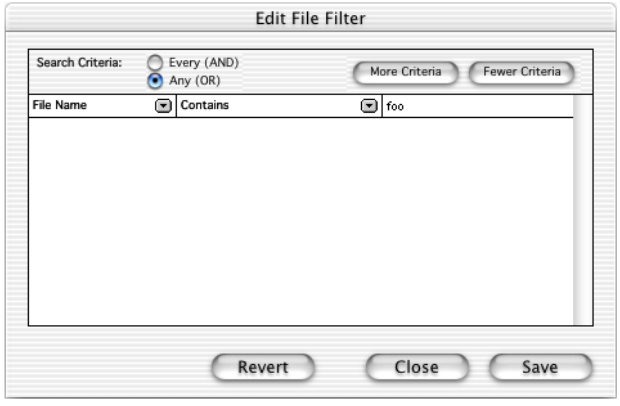
To define a new saved file filter, select New Filter from the pop-up menu. BBEdit will ask you for a filter name; then the Edit File Filter dialog, below, appears. You can also define new file filters in the File Filters panel of the Preferences window (see Chapter 10).



Note If you have the Preferences window open, you will not be able to add filters in the Find & Replace dialog. To work around this, close the Preferences window before using the Find & Replace dialog to add new filters.

The Edit File Filter dialog lets you specify multiple criteria that determine whether a given file is selected by the filter. You can choose whether these criteria are exclusive (that is, whether a file must meet *every* listed test to be selected) or inclusive (that is, whether a file that meets *any* of the tests is selected) using the Every (AND) and Any (OR) radio buttons at the top of the dialog.

To add a test, click More Criteria. A new row appears in the dialog, as shown below.



The leftmost column lets you specify which attribute of a file you wish to test. BBEdit lets you test a file's name, the name of its enclosing folder, its creator or type, its creation and modification date (or both date and time), or its Finder label, visibility, Projector status, or the programming or markup language it is written in. You can also test the content of a file, using the "Contents" criterion.

The middle column lets you choose the test to be applied to the selected attribute. The available options here change depending on what attribute you selected. If you choose Visibility in the first column, for instance, your only choices are whether the file is or is not visible, However, if you choose File Name in the first column, the middle column lets you test to see if the name does or does not exactly match, contain, begin with, or end with a particular string. You can also test file names to see if they match wildcard or Grep patterns.

Note In wildcard patterns, the asterisk (*) and question mark (?) characters have special meanings. The asterisk matches any number of characters, such that "*.c" matches any file whose name ends with ".c". The question mark matches a single character, so that "foo?" matches "food", fool", "foot", and many other words. Both the asterisk and the question mark can be used anywhere in a wildcard pattern, and any number of either can be used in a single pattern.

Grep patterns, also known as regular expressions, are a powerful method of selecting file names based on classes of text or repeating text. They are covered in great detail in the next chapter.

The right column specifies the match criterion. For example, when filtering by File Name, you type the text you want the name to match, contain, begin with, or end with (or not). When filtering by Language, you choose a supported language from a pop-up menu. When filtering by Projector status, you choose a valid status from a pop-up menu (or "missing" to indicate that you want documents that do not have Projector status information).

Tip To quickly set a match criterion, drag a file from the Finder to a field in the Define File Filter dialog. BBEdit inserts the appropriate attribute from the dragged file, if possible.

When using a time or date criterion, you can use the special words below to specify dates and times relative to the current date and time.

Word	Means…
now	current date and time
today	midnight on the current date
yesterday	current date and time minus 24 hours
tomorrow	current date and time plus 24 hours

You can add any number of criteria using the More Criteria button. To delete the last criterion, click the Fewer Criteria button. To select any single criterion for deletion, press the Option key and click on the desired item. To select multiple continuous criteria, press Option-Shift and drag across the items, or to select discontinuous criteria, press Command-Option and click on the desired items.

Click Save to save the file filter and use it for this search. BBEdit will ask you to name the filter, and it will then appear in the Filters pop-up menu in the Find & Replace dialog (and in the Define File Filter dialog). Click Revert to undo any changes you have made to the filter. (Hold the Option key when you click Revert to skip the confirmation alert.)

Temporary Filters

Choose "(current criteria)" from the pop-up menu in the Find & Replace dialog to reuse the last set of criteria applied (either from using a saved filter, or from using the Edit button to define criteria). Thus, you can use filter criteria on the fly, without the need to create and store a throwaway filter.

Editing and Deleting Filters

To edit a file filter you have already defined, choose it from the Filters pop-up menu, change it as desired, and click Save. Since each filter must have a unique name, saving it will replace the old version of the filter. To delete a filter entirely, visit the File Filters panel in the Preferences window. (You can also create or modify filters there.)

Multi-File Replacing

If you want to replace only some occurrences of text in multiple files, you can simply do a File-by-File or Batch Search as described earlier in this chapter, and then use the Replace commands in the Find menu to change only the instances you want to change. However, BBEdit can also change *all* occurrences of a string in a group of files with one command.

Globally replacing text in more than one file works the same as replacing it in a single file. The only possible complication is that, if you make a mistake, it can have much wider consequences. If you are not sure what effect a replace operation will have, test it out on a few sample files, or a copy of your data, first!

Note If the Batch Find option is turned off when performing a multi-file replace operation, each file which contains a match will be opened and left open, and you will not see the Find & Replace All Matches" options dialog.

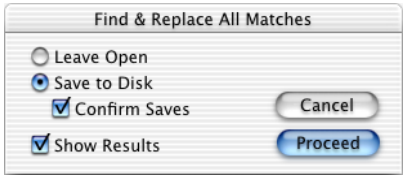
To do a multi-file search and replace, replacing all occurrences:

1 **Set up the find and replace strings in the Find & Replace dialog as described in the section "Multi-File Search."**

2 **Choose the files to be searched as described in "Specifying the Search Set."**

3 **Click Replace All in the Find & Replace dialog, or use its key equivalent of Command-Option-R.**

BBEdit displays the Find & Replace All Matches dialog box:



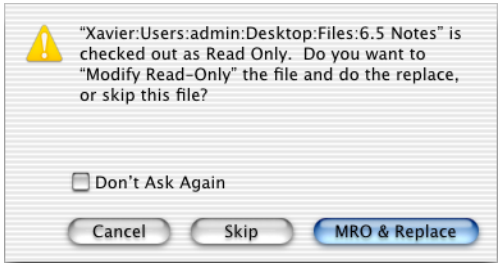
This is what each of the options does:

This option…	Replaces all occurrences of the search string with the replace string and…
Leave Open	Leaves all the files open so that you can inspect the replacements. If there are many files that contain the search string, BBEdit may run out of memory.
Save to Disk	Saves each file with the changes. When the Confirm Saves setting is active, you will have an opportunity to approve the changes before BBEdit saves them to disk. You should *not* turn this off unless you are sure that the replace operation being done is what you want.
Show Results	Opens a results browser listing each of the files which was changed, and the number of changes in each file.

Replacing in Files with Projector CKIDs

In order to track the modification status of files and determine whether a given file is editable at any point in time, MPW's Projector source control system places a resource of type "ckid" in each file. Many other Macintosh applications, including BBEdit, also honor these "ckid" resources. This allows Projector (or similar systems like Mac CVS) to work, by preventing files from being changed accidentally.

During a multi-file replace, whenever BBEdit attempts to modify a file which is designated Read-Only, it will display the following dialog asking you how to handle the file.


"Xavier:Users:admin:Desktop:Files:6.5 Notes" is checked out as Read Only. Do you want to "Modify Read-Only" the file and do the replace, or skip this file?
Don't Ask Again
Cancel
Skip
MRO & Replace

Choosing the Cancel button will stop the multi-file replace operation and leave the current file untouched. Choosing the Skip button will cause BBEdit to skip this file only (leaving it untouched), and continue the multi-file replace operation. Choosing the MRO & Update button will cause BBEdit to mark the file Modify Read-Only, change the file, and continue the multi-file replace operation.

If you select the Don't Ask Again option before clicking Skip or MRO & Update, BBEdit will apply the same action to all files with this Projector state that it encounters during this (and only this) search operation.

Note An equivalent dialog will also be displayed when you perform any other batch operation that modifies files, and a file with a Read-Only "ckid" is encountered.

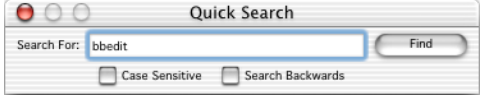
Quick Search

The Quick Search command, formerly located in the Window menu, is now available in the Search menu. Whenever you need to interactively locate a string in a window, you can use this feature. Quick Search lets you do an incremental search. In other words, it shows the matching text as you type the search string, so you only have to type until you find the text you want.

To use Quick Search:

1 **Choose Quick Search from the Search menu.**

2 **Type the string you are looking for in the Quick Search window.**



As you type, BBEdit selects the first occurrence of what you have typed so far.

3 **To find the next occurrence of the matching text, click Find Again.**

You can use the Case Sensitive and Find Backwards options to change the way Quick Search looks for text.

You can keep the Quick Search window open all the time and bring it to the front when you want to search. Quick Search always searches in the text view of the window immediately behind the Quick Search window.

Search Menu Reference

This section describes all of the commands in the Search menu.

Find

Opens the Find & Replace dialog. You can set the search and replace strings, choose searching options, and, for a multi-file search, specify the set of files to search.

Quick Search

Opens the Quick Search window. You can use this window to interactively search for text strings, as described in the previous section.

Find Again

Uses the previous settings of the Find & Replace dialog to search for the next occurrence of the search string.

Tip Hold down the Shift key to search in the opposite direction from the current search direction. For example, if you have set the Backwards option in the Find & Replace dialog, holding down Shift while performing a Find Again will search *forward* in the document.

Find Selection

Uses the selected text as the search string and finds the next occurrence of the selected text. This command is the same as using the Enter Search String command followed by the Find Again command.

Tip Hold down the Shift key to search in the opposite direction from the current search direction, just as for Find Again. Hold down the Option and Command keys as you double-click on a word to search for the next occurrence of that word.

Enter Search/Replace String

Choose the Enter Search String command to enter the currently selected text into the Find & Replace dialog as the search string (without opening the dialog). This command does not perform a search, but only sets the contents of the search string.

When you hold down the Option key, this command becomes Enter Replace String, and behaves identically except that it enters the selected text as the replace string.

Replace

Replaces the selected text (usually an occurrence of the search string) with the replace string.

Replace All

Replaces every occurrence of the search string in a file with the replace string.

Replace & Find Again

Replaces the selected text with the replace string and searches for the next occurrence of the search string.

Find in Next File

When doing a non-batch multi-file search, this command looks for the first occurrence of the search string in the next file.

Open All Matches

This command opens all the files in the search set that contain at least one occurrence of the search string.

Find & Replace All Matches

In a multi-file search-and-replace for which Batch Find is turned off, this command finds every occurrence of the search string in every file in the search set and replaces them with the replace string. When you choose this command, BBEdit opens a dialog that gives you an opportunity to approve replacements.

Go to Line

When you choose this command, BBEdit opens the Go To Line dialog box. Type in a line number and the frontmost text window will jump to display that line.

Note The Go To Line command honors the "Use 'Hard' Line Numbering in Soft-Wrapped Text Views" option in the Text Editing panel of the Preferences window.

Go to Center Line

Will move the insertion point to the beginning of the middle or center line of the displayed text.

Go to Previous/Next Error

If an error browser is open, this command will open the listed error which came before or after the selected error. See Chapter 9 for more information on error browsers.

Go to Previous/Next Placeholder

When you use a glossary file that contains multiple #INSERTION# cookies, the second and subsequent cookies are replaced with the string #•#. You can use the Go To Previous/Next Placeholder commands to jump back and forth between these special strings from the keyboard. For example, you might use this command when filling in the parameters of a function call, or a series of tag attributes.

Find Differences

Finds the differences between two files, or all of the files contained in two folders. See Chapter 4 for more details.

Apply to New

Applies the currently selected difference to the “New” version of two files which are being compared. See Chapter 4 for more details

Apply to Old

Applies the currently selected difference to the “Old” version of two files which are being compared.

Compare Again

Find the differences between two files, using the same settings that were used in the last time you used the Find Differences command. See Chapter 4 for more details.

Find in Reference

Looks up the selected text using your chosen Macintosh Toolbox reference program.

Find Definition

Looks up the selected text from whatever project document is currently open in CodeWarrior.

CHAPTER

8

Searching with Grep

This chapter describes the Grep option in BBEdit's Find command, which allows you to find and change text that matches a set of conditions you specify. Combined with the multi-file search and replace features described in Chapter 7, BBEdit's grep capabilities can make many editing tasks quicker and easier, whether you are modifying Web pages, extracting data from a file, or just rearranging a phone list.

In a substantial change from versions prior to 6.5, BBEdit now incorporates a considerably more powerful grep engine based on the PCRE package. Even if you were familiar with grep searching in previous versions of BBEdit, you should read through this chapter if you are not already familiar with PCRE syntax. In particular, many new special characters and constructs are now available, while the meaning of some previously used options has changed.

In this chapter

What Is Grep or Pattern Searching? **116**
Recommended Books and Resources **116**
Writing Search Patterns **117**
Most Characters Match Themselves – 117
Escaping Special Characters – 117
Wildcards Match Types of Characters – 118
Character Classes Match Sets or Ranges of Characters – 120
Matching Non-Printing Characters – 121
Other Special Character Classes – 122
Quantifiers Repeat Subpatterns – 122
Combining Patterns to Make Complex Patterns – 123
Creating Subpatterns – 124 • *Using Alternation* – 125
The "Longest Match" Issue – 126 • *Non-Greedy Quantifiers* – 126
Writing Replacement Patterns **127**
Subpatterns Make Replacement Powerful – 127
Using the Entire Matched Pattern – 128
Using Parts of the Matched Pattern – 128
Case Transformations – 129
Examples **130**
Matching Identifiers – 130 • *Matching White Space* – 130
Matching Delimited Strings – 131 • *Marking Structured Text* – 131
Marking a Mail Digest – 132 • *Rearranging Name Lists* – 132
Advanced Grep Topics **133**
Matching Nulls – 133 • *Backreferences* – 133
POSIX-Style Character Classes – 135
Non-Capturing Parentheses – 135
Perl-Style Pattern Extensions – 136 • *Comments* – 137
Pattern Modifiers – 137 • *Positional Assertions* – 139
Conditional Subpatterns – 141 • *Once-Only Subpatterns* – 142
Recursive Patterns – 144

What Is Grep or Pattern Searching?

Grep patterns offer a powerful way to make changes to your data that "plain text" searches simply cannot. For example, suppose you have a list of people's names that you want to alphabetize. If the names appear last name first, you can easily put these names in a BBEdit window and use the Sort tool. But if the list is arranged first name first, a simple grep pattern can be used to put the names in the proper order for sorting.

A grep pattern, also known as a regular expression, describes the text that you are looking for. For instance, a pattern can describe words that begin with C and end in l. A pattern like this would match "Call", "Cornwall", and "Criminal" as well as hundreds of other words.

In fact, you have probably already used pattern searching without realizing it. The Find & Replace dialog's "Match Case" and "Entire Word" options turn on special searching patterns. Suppose that you are looking for "corn". With the "Match Case" option turned off, you are actually looking for a pattern that says: look for a C or c, O or o, R or r, and N or n. With the "Entire Word" option on, you are looking for the string "corn" only if it is surrounded by white space or punctuation characters; special search characters, called metacharacters, are added to the search string you specified to indicate this.

What makes pattern searching counterintuitive at first is how you describe the pattern. Consider the first example above, where we want to search for text that begins with the letter "C" and ends with the letter "l" with any number of letters in between. What exactly do you put between them that means "any number of letters"? That is what this chapter is all about.

Note Grep is the name of a frequently used Unix command that searches using regular expressions, the same type of search pattern used by BBEdit. For this reason, you will often see regular expressions called "grep patterns," as BBEdit does. They're the same thing.

Recommended Books and Resources

Mastering Regular Expressions, 2nd Edition

by Jeffrey E.F. Friedl. O'Reilly & Associates, 2002. ISBN 0-596-00289-0

Although it does not cover BBEdit's grep features specifically, *Mastering Regular Expressions* is an outstanding resource for learning the "how-to" of writing useful grep patterns, and the new second edition is even better than the original.

BBEdit-Talk

The BBEdit-Talk online mailing list covers a wide range of topics and questions about using BBEdit, which frequently include searching and the use of grep patterns. To subscribe to this list, please visit the support section of our web site, which offers the option to sign up.

```
http://www.barebones.com/support/lists.html
```

Tech Note BBEdit's grep engine is based on the PCRE library package, which is open source software, written by Philip Hazel, and copyright 1997-2000 by the University of Cambridge, England. For details, see <ftp://ftp.csx.cam.ac.uk/pub/software/programming/pcre/>.

Writing Search Patterns

This section explains how to create search patterns using BBEdit's grep syntax. For readers with prior experience, this is essentially like the syntax used for regular expressions in the Perl programming language. (However, you *do not* need to understand anything about Perl in order to make use of BBEdit's grep searching.)

Most Characters Match Themselves

Most characters that you type into the Find & Replace dialog match themselves. For instance, if you are looking for the letter "t", Grep stops and reports a match when it encounters a "t" in the text. This idea is so obvious that it seems not worth mentioning, but the important thing to remember is that these characters *are* search patterns. Very simple patterns, to be sure, but patterns nonetheless.

Escaping Special Characters

In addition to the simple character matching discussed above, there are various special characters that have different meanings when used in a grep pattern than in a normal search. (The use of these characters is covered in the following sections.)

However, sometimes you will need to include an exact, or literal, instance of these characters in your grep pattern. In this case, you must use the backslash character \ before that special character to have it be treated literally; this is known as "escaping" the special character. To search for a backslash character itself, double it \\ so that its first appearance will escape the second.

For example, perhaps the most common "special character" in grep is the dot: ".". In grep, a dot character will match any character except a return. But what if you only want to match a literal dot? If you escape the dot: "\.", it will only match another literal dot character in your text.

So, most characters match themselves, and even the special characters will match themselves if they are preceded by a backslash. BBEdit's grep syntax coloring helps make this clear.

Note When passing grep patterns to BBEdit via AppleScript, be aware that both the backslash and double-quote characters have special meaning to AppleScript. In order to pass these through correctly, you must escape them in your script. Thus, to pass \r for a carriage return to BBEdit, you must write \\r in your AppleScript string.

Wildcards Match Types of Characters

These special characters, or metacharacters, are used to match certain types of other characters:

Wildcard	Matches…
`.`	any character except a line break (that is, a carriage return)
`^`	beginning of a line (unless used in a character class)
`$`	end of line (unless used in a character class)

Being able to specifically match text starting at the beginning or end of a line is an especially handy feature of grep. For example, if you wanted to find every instance of a message sent by Patrick, from a log file which contains various other information like so:

```
From: Rich, server: barebones.com
To: BBEdit-Talk, server: lists.barebones.com
From: Patrick, server: example.barebones.com
```

you could search for the pattern:

```
^From: Patrick
```

and you will find every occurrence of these lines in your file (or set of files if you do a multi-file search instead).

It is important to note that ^ and $ do not actually match return characters. They match zero-width *positions* after and before returns, respectively. So, if you are looking for "foo" at the end of a line, the pattern "`foo$`" will match the three characters "f", "o", and "o". If you search for "`foo\r`", you will match the same text, but the match will contain four characters: "f", "o", "o", and a return.

In soft-wrapped files, ^ and $ will also match after and before soft line breaks, respectively.

You can combine ^ and $ within a pattern to force a match to constitute an entire line. For example:

```
^foo$
```

will only match "foo" on a line by itself, with no other characters. Try it against these three lines to see for yourself:

```
foobar
foo
fighting foo
```

The pattern will only match the second line.

WARNING In previous versions of BBEdit, the # character was a wildcard that matched any digit (0–9). Beginning with BBEdit 6.5, this is no longer true. If you have grep patterns written with a previous version of BBEdit that use # for this purpose, you will need to change these patterns. The easiest way to do this is to use the \d character class, which has the exact same meaning that # used to—it matches any character from 0-9. Character classes are explained in the next section.

Other Positional Assertions

BBEdit's grep engine supports additional positional assertions, very similar to ^ and $.

Escape	Matches
\A	only at the beginning of the document (as opposed to ^, which matches at the beginning of the document and also at the beginning of each line)
\b	any word boundary, defined as any position between a \w character and a \W character, in either order
\B	any position that is *not* a word boundary
\z	at the end of the document (as opposed to $, which matches at the end of the document and also at the end of each line)
\Z	at the end of the document, or before a trailing return at the end of the doc, if there is one

Examples (the text matched by the pattern is underlined)

Search for: `\bfoo\b`
Will match: `bar foo bar`
Will match: `foo bar`
Will not match: `foobar`

Search for: `\bJane\b`
Will match: `Jane's`
Will match: `Tell Jane about the monkey.`

Search for: `\Afoo`
Will match: `foobar`
Will not match: `This is good foo.`

Character Classes Match Sets or Ranges of Characters

The character class construct lets you specify a set or a range of characters to match, or to ignore. A character class is constructed by placing a pair of square brackets […] around the group or range of characters you wish to include. To exclude, or ignore, all characters specified by a character class, add a caret character ^ just after the opening bracket [^…]. For example:

Character Class	Matches
`[xyz]`	any one of the characters x, y, z
`[^xyz]`	any character except x, y, z
`[a-z]`	any character in the range a to z

You can use any number of characters or ranges between the brackets. Here are some examples:

Character Class	Matches
`[aeiou]`	any vowel
`[^aeiou]`	any character that is not a vowel
`[a-zA-Z0-9]`	any character from a-z, A-Z, or 0-9
`[^aeiou0-9]`	any character that is neither a vowel nor a digit

A character class matches when the search encounters any *one* of the characters in the pattern. However, the contents of a set are only treated as separate characters, not as words. For example, if your search pattern is `[beans]` and the text in the window is "lima beans", BBEdit will report a match at the "a" of the word "lima".

To include the character] in a set or a range, place it immediately after the opening bracket. To use the ^ character, place it anywhere except immediately after the opening bracket. To match a dash character (hyphen) in a range, place it at the beginning of the range; to match it as part of a set, place it at the beginning or end of the set. Or, you can include any of these character at any point in the class by escaping them with a backslash.

Character Class	Matches
`[]0-9]`	any digit or]
`[aeiou^]`	a vowel or ^
`[-A-Z]`	a dash or A - Z
`[--A]`	any character in the range from - to A
`[aeiou-]`	any vowel or -
`[aei\-ou]`	any vowel or -

Character classes respect the setting of the Case Sensitive checkbox in the Find & Replace dialog. For example, if Case Sensitive is on, `[a]` will only match "a"; if Case Sensitive is off, `[a]` will match both "a" and "A".

Matching Non-Printing Characters

As described in Chapter 7 on searching, BBEdit provides several special character pairs that you can use to match common non-printing characters, as well as the ability to specify any arbitrary character by means of its hexadecimal character code (escape code). You can use these special characters in grep patterns as well as for normal searching.

For example, to look for a tab or a space, you would use the character class `[\t ]` (consisting of a tab special character and a space character).

Character	Matches
\r	line break (carriage return)
\n	Unix line break (line feed)
\t	tab
\f	page break (form feed)
\a	alarm (hex 07)
\cX	a named control character, like \cC for Control-C
\b	backspace (hex 08) *(only in character classes)*
\e	Esc (hex 1B)
\x*NN*	hexadecimal character code *NN* (for example, \x0D for CR)
\x{*NNNN*}	any number of hexadecimal characters *NN*… (for example, \x{0} will match a null, \x{304F} will match a Japanese Unicode character)
\\	backslash

Use \r to match a line break in the middle of a pattern and the special characters ^ and $ (described above) to "anchor" a pattern to the beginning of a line or to the end of a line. In the case of ^ and $, the line break character is not included in the match.

Other Special Character Classes

BBEdit uses several other sequences for matching different types or categories of characters.

Special Character	Matches
`\s`	any whitespace character (space, tab, carriage return, line feed, form feed)
`\S`	any non-whitespace character (any character not included by `\s`)
`\w`	any word character (a-z, A-Z, 0-9, _, and some 8-bit characters)
`\W`	any non-word character (all characters not included by `\w`, including carriage returns)
`\d`	any digit (0-9)
`\D`	any non-digit character (including carriage return)

A "word" is defined in BBEdit as any run of non-word-break characters bounded by word breaks. Word characters are generally alphanumeric, and some characters whose value is greater than 127 are also considered word characters.

Note that any character matched by `\s` is by definition not a word character; thus, anything matched by `\s` will also be matched by `\W` (but not the reverse!).

Quantifiers Repeat Subpatterns

The special characters `*`, `+`, and `?` specify *how many times* the pattern preceding them may repeat. `{}`-style quantifiers allow you to specify exactly how many times a subpattern can repeat. The preceding pattern can be a literal character, a wildcard character, a character class, or a special character.

Pattern	Matches
`p*`	zero or more p's
`p+`	one or more p's
`p?`	zero or one p's
`p{`*`COUNT`*`}`	match exactly *COUNT* p's, where *COUNT* is an integer
`p{`*`MIN`*`,}`	match at least *MIN* p's, where *MIN* is an integer
`p{`*`MIN, MAX`*`}`	match at least *MIN* p's, but no more than *MAX*

Note that the repetition characters * and ? match *zero or more* occurrences of the pattern. That means that they will *always* succeed, because there will always be at least zero occurrences of any pattern, but that they will not necessarily select any text (if no occurrences of the preceding pattern are present).

For this reason, when you are trying to match more than one occurrence, it is usually better to use a + than a *, because + *requires* a match, whereas * can match the empty string. Only use * when you are sure that you really mean "zero or more times," not just "more than once."

Try the following examples to see how their behavior matches what you expect:

Pattern	Text	Matches
`.*`	Fourscore and seven years	Fourscore and seven years
`[0-9]+`	I've been a loyal member since 1983 or so.	1983
`\d+`	I've got 12 years on him.	12
`A+`	BAAAAAAAB	AAAAAAA
`A{3}`	BAAAAB	AAA *(first three A's)*
`A{3,}`	BAAAAB	AAAA
`A{1,3}`	BAAAAB	AAA on the first match, the remaining A on the second match
`c?andy`	andy likes candy	"andy" on the first match, "candy" on the second
`A+`	Ted joined AAA yesterday	"AAA" on the first match; "a" from yesterday on the second

Combining Patterns to Make Complex Patterns

So far, the patterns you have seen match a single character or the repetition of a single character or class of characters. This is very useful when you are looking for runs of digits or single letters, but often that is not enough.

However, by combining these patterns, you can search for more complex items. As it happens, you are already familiar with combining patterns. Remember the section at beginning of this discussion that said that each individual character is a pattern that matches itself? When you search for a word, you are already combining basic patterns.

You can combine any of the preceding grep patterns in the same way. Here are some examples.

Pattern	Matches	Examples
`\d+\+\d+`	a string of digits, followed by a literal plus sign, followed by more digits	4+2 1234+5829
`\d{4}[\t ]B\.C\.`	four digits, followed by a tab or a space, followed by the string B.C.	2152 B.C.

Pattern	Matches	Examples
`\$?[0-9,]+\.\d*`	an optional dollar sign, followed by one or more digits and commas, followed by a period, then zero or more digits	1,234.56 $4,296,459.19 $3,5,6,4.0000 0. *(oops!)*

Note again in these examples how the characters that have special meaning to grep are preceded by a backslash (`\+`, `\.`, and `\$`) when we want them to match themselves.

Creating Subpatterns

Subpatterns provide a means of organizing or grouping complex grep patterns. This is primarily important for two reasons: for limiting the scope of the alternation operator (which otherwise creates an alternation of everything to its left and right), and for changing the matched text when performing replacements. A subpattern consists of any simple or complex pattern, enclosed in a pair of parentheses:

Pattern	Matches
`(p)`	the pattern *p* and remembers it

You can combine more than one subpattern into a grep pattern, or mix subpatterns and other pattern elements as you need.

Taking the last set of examples, you could modify these to use subpatterns wherever actual data appears:

Pattern	Matches	Examples
`(\d+)\+(\d+)`	a string of digits, followed by a plus sign, followed by more digits	4+2 1234+5829
`(\d{4})[\t ]B\.C\.`	four digits, followed by a tab or a space, followed by the string B.C.	2152 B.C.
`\$?([0-9,]+)\.(\d*)`	an optional dollar sign, followed by one or more digits and commas, followed by a period, then zero or more digits	1,234.56 $4,296,459.19 $3,5,6,4.0000 0.

What if we wanted to match a series of digits, followed by a plus sign, followed by the exact same series of digits as on the left side of the plus? In other words, we want to match "1234+1234" or "7+7", but *not* "5432+1984".

Using grouping parentheses, you can do this by referring to a backreference, also known as a captured subpattern. Each set of parentheses in the pattern is numbered from left to right, starting with the opening parenthesis. Later in the pattern, you can refer to the text matched within these backreferences by using a backslash followed by the number of the backreference.

Pattern	Matches	Examples
`(\d+)\+\1`	a string of digits, followed by a plus sign, followed the same digits	7+7 1234+1234
`(\w+)\s+\1`	double words	the the
`(\w)(\w)\2\1`	a word character, a second word character, followed by the second one again and the first one again	abba

We will revisit subpatterns in the section on replacement, where you will see how the choice of subpatterns affects the changes you can make.

Using Alternation

The alternation operator | allows you to match any of several patterns at a given point. To use this operator, place it between one or more patterns x|y to match either x or y.

As with all of the preceding options, you can combine alternation with other pattern elements to handle more complex searches.

Pattern	Text is…	Matches…
`a|t`	A cat	each “a” and “t”
`a|c|t`	A cat	each “a”, “c”, and “t”
`a (cat|dog) is`	A cat is here. A dog is here. A giraffe is here.	“A cat is”, “A dog is”
`A|b+`	Abba	“A”, “bb”, and “a”
`Andy|Ted`	Andy and Ted joined AAA yesterday	“Andy” and “Ted”
`\d{4}|years`	I’ve been a loyal member since 1983, almost 16 years ago.	“1983”, “years”
`[a-z]+|\d+`	That’s almost 16 years.	“That”, “s”, “almost”, “16”, “years”

The "Longest Match" Issue

IMPORTANT When creating complex patterns, you should bear in mind that the quantifiers `+`, `*`, `?` and `{}` are "greedy." That is, they will always make the longest possible match possible to a given pattern, so if your pattern is E+ (one or more E's) and your text contains "EEEE", the pattern matches all the E's at once, not just the first one. This is usually what you want, but not always.

Suppose, for instance, that you want to match an HTML tag. At first, you may think that a good way to do this would be to search for the pattern:

```
<.+>
```

consisting of a less-than sign, followed by one or more occurrences of a single character, followed by a greater-than sign. To understand why this may not work the way you think it should, consider the following sample text to be searched:

```
<B>This text is in boldface.</B>
```

The intent was to write a pattern that would match both of the HTML tags separately. Let's see what actually happens. The < character at the beginning of this line matches the beginning of the pattern. The next character in the pattern is . which matches any character (except a line break), modified with the + quantifier, taken together, this combination means one or more repetitions of any character. That, of course, takes care of the B. The problem is that the next > is also "any character" and that it *also* qualifies as "one or more repetitions." In fact, all of the text up to the end of the line qualifies as "one or more repetitions of any character" (the line break does not qualify, so grep stops there). After grep has reached the line break, it has exhausted the + operator, so it backs up and sees if it can find a match for >. Lo and behold, it can: the last character is a greater-than symbol. Success!

In other words, the pattern matches our entire sample line at once, *not the two separate HTML tags in it as we intended.* More generally, the pattern matches all the text in a given line or paragraph from the first < to the *last* >. The pattern only does what we intended when there is only one HTML tag in a line or paragraph. This is what we meant when we say that the regular quantifiers try to make the longest possible match.

Non-Greedy Quantifiers

IMPORTANT To work around this "longest match" behavior, you can modify your pattern to take advantage of *non-greedy* quantifiers.

Quantifier	Matches…
`+?`	one or more
`*?`	zero or more
`??`	zero or one
`{`*`COUNT`*`}?`	match exactly *COUNT* times
`{`*`MIN`*`,}?`	match at least *MIN* times
`{`*`MIN, MAX`*`}?`	match at least *MIN* times, but no more than *MAX*

Astute readers will note that these non-greedy quantifiers correspond exactly to their normal (greedy) counterparts, appended with a question mark.

Revisiting our problem of matching HTML tags, for example, we can search for:

```
<.+?>
```

This matches an opening bracket, followed by one or more occurrences of any character other than a return, followed by a closing bracket. The non-greedy quantifier achieves the results we want, preventing BBEdit from "overrunning" the closing angle bracket and matching across several tags.

A slightly more complicated example: how could you write a pattern that matches all text between <B> and </B> HTML tags? Consider the sample text below:

```
<B>Welcome</B> to the home of <B>BBEdit!</B>
```

As before, you might be tempted to write:

```
<B>.*</B>
```

but for the same reasons as before, this will match the entire line of text. The solution is similar; we will use the non-greedy `*?` quantifier:

```
<B>.*?</B>
```

Writing Replacement Patterns

Subpatterns Make Replacement Powerful

We covered subpatterns earlier when discussing search patterns and discussed how the parentheses can be used to limit the scope of the alternation operator. Another reason for employing subpatterns in your grep searches is to provide a powerful and flexible way to change or reuse found information as part of a search-and-replace operation. If you do not use subpatterns, you can still access the complete results of the search with the & metacharacter. However, this precludes reorganizing the matched data as it is replaced.

Pattern	Matches…
`&`	the entire matched pattern [replacement only]
`(p)`	the pattern p and remembers it [search only]
`\1, \2, …, \99`	the nth subpattern in the entire search pattern

Note BBEdit will now remember up to 99 backreferenced subpatterns. Versions prior to 6.5 were limited to 9 subpatterns.

Using the Entire Matched Pattern

The & character is useful when you want to use the entire matched string as the basis of a replacement. Suppose that in your text every instance of product names that begin with the company name "ACME" needs to end with a trademark symbol (™). The following search pattern finds two-word combinations that begin with "ACME":

```
ACME [A-Za-z]+
```

The following replacement string adds the trademark symbol to the matched text:

```
&™
```

For example, if you start with

```
ACME Magnets, ACME Anvils, and ACME TNT are all premium
products.
```

and perform a replace operation with the above patterns, you will get:

```
ACME Magnets™, ACME Anvils™, and ACME TNT™ are all premium
products.
```

Using Parts of the Matched Pattern

While using the entire matched pattern in a replacement string is useful, it is often more useful to use only a portion of the matched pattern and to rearrange the parts in the replacement string.

For example, suppose a source file contains C-style declarations of this type:

```
#define Util_Menu 284
#define Tool_Menu 295
```

and you want to convert them so they look like this, Pascal-style:

```
const int Util_Menu = 284;
const int Tool_Menu = 295;
```

The pattern to find the original text is straightforward:

```
#define[ \t]+.+[ \t]+\d+[^0-9]*$
```

This pattern matches the word "#define" followed by one or more tabs or spaces, followed by one or more characters of any type, followed by one or more tabs or spaces, followed by one or more digits, followed by zero or more characters that are *not* digits (to allow for comments), followed by the end of the line.

The problem with this pattern is that it matches the entire line. It does not provide a way to remember the individual parts of the found string.

If you use subpatterns to rewrite the above search pattern slightly, you get this:

```
#define[ \t]+(.+)[ \t]+(\d+)[^0-9]*$
```

The first set of parentheses defines a subpattern which remembers the name of the constant. The second set remembers the value of the constant.

The replacement string would look like this:

```
const int \1 = \2;
```

The sequence `\1` is replaced by the name of the constant (the first subpattern from the search pattern), and the sequence `\2` is replaced by the value of the constant (from the second subpattern).

Our example throws out any comment that may follow the C-style constant declaration. As an exercise, try rewriting the search and replace patterns so they preserve the comment, enclosing it in (*…*) style Pascal comment markers.

Here are some more examples:

Data	Search for	Replace	Result
4+2	(\d+)\+(\d+)	\2+\1	2+4
1234+5829	(\d+)\+(\d+)	\1+\1	1234+1234
2152 B.C.	(\d{4})[\t]B\.C\.	\1 A.D.	2152 A.D.
1,234.56	\$?([0-9,]+)\.(\d+)	\1 dollars and \2 cents	1,234 dollars and 56 cents
$4,296,459.19	\$?([0-9,]+)\.(\d+)	\1 dollars and \2 cents	4,296,459 dollars and 19 cents
$3,5,6,4.00000	\$?([0-9,]+)\.(\d+)	\1 dollars and \2 cents	3,5,6,4 dollars and 00000 cents

Case Transformations

Replace patterns can also change the case of the original text when using subpattern replacements. The syntax is similar to Perl's, specifically:

Modifier	Effect
\u	Make the next character uppercase
\U	Make all following characters uppercase until reaching another case specifier (\u, \L, \l) or \E
\l	Make the next character lowercase
\L	Make all following characters lowercase until reaching another case specifier (\u, \U, \l) or \E
\E	End case transformation opened by \U or \L

Here are some examples to illustrate how case transformations can be used.

Given some text:

```
mumbo-jumbo
```

and the search pattern:

```
(\w+)(\W)(\w+)
```

the following replace patterns will produce the following output:

```
\U\1\E\2\3    MUMBO-jumbo
\u\1\2\u\3                Mumbo-Jumbo
```

Note that case transformations also affect literal strings in the replace pattern:

```
\U\1\2fred                MUMBO-FRED
\lMUMBLE\2\3              mUMBLE-jumbo
```

Finally, note that \E is not necessary to close off a modifier; if another modifier appears before an \E is encountered, that modifier will take effect immediately:

```
\Ufred-\uwilma            FRED-Wilma
```

Examples

The example patterns in this section describe some common character classes and shortcuts used for constructing grep patterns, and addresses some common tasks that you might find useful in your work.

Matching Identifiers

One of the most common things you will use grep patterns for is to find and modify identifiers, such as variables in computer source code or object names in HTML source documents. To match an arbitrary identifier in most programming languages, you might use this search pattern:

```
[a-z][a-zA-Z0-9]*
```

This pattern matches any sequence that begins with a lowercase letter and is followed by zero or more alphanumeric characters. If other characters are allowed in the identifier, add them to the pattern. This pattern allows underscores in only the first character of the identifier:

```
[a-z_][a-zA-Z0-9]*
```

The following pattern allows underscores anywhere *but* the first character, but allows identifiers to begin with an uppercase or lowercase letter:

```
[a-zA-Z][a-zA-Z0-9_]*
```

Matching White Space

Often you will want to match two sequences of data that are separated by tabs or spaces, whether to simply identify them, or to rearrange them.

For example, suppose you have a list of formatted label-data pairs like this:

```
User name:   Bernard Rubble
Occupation:  Actor
Spouse:      Betty
```

You can see that there are tabs or spaces between the labels on the left and the data on the right, but you have no way of knowing how many spaces or tabs there will be on any given line. Here is a character class that means "match one or more white space characters."

```
[ \t]+
```

So, if you wanted to transform the list above to look like this:

```
User name("Bernard Rubble")
Occupation("Actor")
Spouse("Betty")
```

You would use this search pattern:

```
([a-z ]+):[ \t]+([a-z ]+)
```

and this replacement pattern:

```
\1\("\2"\)
```

Matching Delimited Strings

In some cases, you may want to match all the text that appears between a pair of delimiters. One way to do this is to bracket the search pattern with the delimiters, like this:

```
".*"
```

This works well if you have only one delimited string on the line. But suppose the line looked like this:

```
"apples", "oranges, kiwis, mangos", "penguins"
```

The search string above would match the entire line. (This is another instance of the "longest match" behavior of BBEdit's grep engine, which was discussed previously.)

Once again, non-greedy quantifiers come to the rescue. The following pattern will match "-delimited strings:

```
".+?"
```

Marking Structured Text

Suppose you are reading a long text document that does not have a table of contents, but you notice that all the sections are numbered like this:

```
3.2.7     Prehistoric Cartoon Communities
5.19.001  Restaurants of the Mesozoic
```

You can use a grep pattern to create marks for these headings, which will appear in the Mark pop-up menu. Choose Find & Mark All from the Mark pop-up menu in the status bar. Then, decide how many levels you want to mark. In this example, the headings always have at least two digits and at most four.

Use this pattern to find the headings:

```
^(\d+\.\d+\.?\d*\.?\d*)[ \t]+([a-z ]+)
```

and this pattern to make the file marks:

```
\1 \2
```

The ^ before the first search group ensures that BBEdit matches the numeric string at the beginning of a line. The pattern

```
\.?\d*
```

matches a (possible) decimal point and a digit sequence. The other groups use the white space idiom and the identifier idiom. You can use a similar technique to mark any section that has a section mark that can be described with grep.

Marking a Mail Digest

You can elaborate the structured text technique to create markers for mail digests. Assume that each digest is separated by the following lines:

```
From: Sadie Burke <sadie@burke.com>
Date: Sun, 16 Jul 1995 13:17:45 -0700
Subject: Fishing with the judge
```

Suppose you want the marker text to list the subject and the sender. You would use the following search string:

```
^From:[ \t]+(.*)\r.*\rSubject:[ \t]+(.*)
```

And mark the text with this replacement string:

```
\2 \1
```

Note that for the sequence \r.*\r in the middle of the search string, the \r before "Subject" is necessary because as previously discussed, the special character . does not match carriage returns. (At least, not by default. See "Advanced Topics," below, for details on how to make dot match *any* character, including carriage returns.)

Rearranging Name Lists

You can use grep patterns to transform a list of names in first name first form to last name first order (for a later sorting, for instance). Assume that the names are in the form:

```
Junior X. Potter
Jill Safai
Dylan Schuyler Goode
Walter Wang
```

If you use this search pattern:

```
^(.*) ([^ ]+)$
```

And this replacement string:

```
\2, \1
```

The transformed list becomes:

```
Potter, Junior X.
Safai, Jill
Goode, Dylan Schuyler
Wang, Walter
```

Advanced Grep Topics

BBEdit's new PCRE-based grep engine offers unparalleled syntactical power. The topics below cover areas that show how grep can effectively match very complicated patterns of text—matches which were impossible to achieve with older versions of BBEdit. However, with this power comes complexity.

If you are new to grep, it is possible that the topics covered in this section will not make much sense to you. That's OK. The best way to learn grep is to use it in real life, not by reading example patterns. In many cases, the basic grep syntax covered previously in this chapter will be all that you need.

If you are an experienced user of grep from previous versions of BBEdit, however, many of the topics covered below will be of great interest.

Matching Nulls

The grep engine used in versions of BBEdit prior to 6.5 was unable to search text that contained null characters (ASCII value zero), but this limitation has since been removed. Here's one way to match a null:

```
\x{0}
```

Backreferences

The following charts explain the rules BBEdit uses for determining backreferences.

In Search Patterns

Modifier	Effect
\0	A backslash followed by a zero is an octal character reference. Up to two further octal characters are read. Thus, "\040" will match a space character, and "\07" will match the ASCII BEL (\x07), but "\08" will match an ASCII null followed by the digit 8 (because octal characters only range from 0-7).
\1-9	A backslash followed by a single decimal digit from 1 to 9 is always a backreference to the *Nth* captured subpattern.

Modifier	Effect
\10-99	A backslash followed by two decimal digits, which taken together form the integer N (ranging from 10 to 99), is a backreference to the *Nth* captured subpattern, *if* there exist *N* capturing sets of parentheses in the pattern. If there are fewer than *N* captured subpatterns, the grep engine will instead look for up to three octal digits following the backslash. Any subsequent digits stand for themselves. So, in a search pattern, "\11" is a backreference if there are 11 or more sets of capturing parentheses in the pattern. If not, it matches a tab. "\011" always matches a tab. "\81" is a backreference if there are 81 or more captured subpatterns, but matches an ASCII null followed by the two characters "8" and "1" otherwise.

In Character Classes

Modifier	Effect
OCTAL	Inside a character class, a backslash followed by up to three octal digits generates a single byte character reference from the least significant eight bits of the value. Thus, the character class "[\7]" will match a single byte with octal value 7 (equivalent to "\x07"). "[\8]" will match a literal "8" character.

In Replacement Patterns

Modifier	Effect
NNN+	If more than two decimal digits follow the backslash, only the first two are considered part of the backreference. Thus, "\111" would be interpreted as the 11th backreference, followed by a literal "1". You may use a leading zero; for example, if in your replacement pattern you want the first backreference followed by a literal "1", you can use "\011". (If you use "\11", you will get the 11th backreference, even if it is empty.)
NN	If two decimal digits follow the backslash, which taken together represent the value N, and if there is an Nth captured substring, then all three characters are replaced with that substring. If there is not an Nth captured substring, all three characters are discarded—that is, the backreference is replaced with the empty string.
N	If there is only a single digit N following the backslash and there is an Nth captured substring, both characters are replaced with that substring. Otherwise, both characters are discarded—that is, the backreference is replaced with the empty string. In replacement patterns, \0 is a backreference to the entire match (exactly equivalent to "&").

POSIX-Style Character Classes

BBEdit now provides support for POSIX-style character classes. These classes are used in the form `[:CLASS:]`, and are *only* available inside regular character classes (in other words, inside another set of square brackets).

Class	Meaning
alnum	letters and digits
alpha	letters
ascii	character codes 0-127
cntrl	control characters
digit	decimal digits (same as \d)
graph	printing characters, excluding spaces
lower	lower case letters
print	printing characters, including spaces
punct	punctuation characters
space	white space (same as \s)
upper	upper case letters
word	"word" characters (same as \w)
xdigit	hexadecimal digits

For example: `[[:digit:]]+` is the same as: `[\d]+`

POSIX-style character class names are case-sensitive.

It is easy to forget that POSIX-style character classes are only available inside regular character classes. The pattern `[:space:]`, without enclosing square brackets, is just a character class consisting of the characters ":", "a", "c", "e", "p", and "s".

The names "ascii" and "word" are Perl extensions; the others are defined by the POSIX standard. Another Perl extension supported by BBEdit is negated POSIX-style character classes, which are indicated by a ^ after the colon. For example, to match any run of non-digit characters:

```
[[:^digit:]]+
```

Non-Capturing Parentheses

As in previous versions of BBEdit, bare parentheses cluster and capture the subpatterns they contain. The portion of the matching pattern contained within the first pair of parentheses is available in the backreference \1, the second in \2, and so on.

Opening parentheses are counted from left to right to determine the numbers of the captured subpatterns. For example, if the following grep pattern:

```
((red|white) (king|queen))
```

is matched against the text “red king”, the backreferences will be set as follows:

```
\1  "red king"
\2  "red"
\3  "king"
```

Sometimes, however, parentheses are needed for only for clustering, not capturing. BBEdit now supports non-capturing parentheses, using the syntax:

```
(?:PATTERN)
```

That is, if an open parenthesis is followed by “?:”, the subpattern matched by that pair of parentheses is not counted when computing the backreferences. For example, if the text “red king” is matched against the pattern:

```
(?:(red|white) (king|queen))
```

the backreferences will be set as follows:

```
\1  "red"
\2  "king"
```

Perl-Style Pattern Extensions

BBEdit’s grep engine supports several extended sequences, which provide grep patterns with super-powers from another universe. Their syntax is in the form:

```
(?KEY…)
```

in other words, an open parenthesis followed by a question mark, followed by a KEY for the particular grep extension, followed by the rest of the subpattern and a closing parenthesis. This syntax—specifically, an open parenthesis followed by a question mark—was not valid in older versions of BBEdit, thus, none of these extensions will conflict with old patterns.

We have already seen one such extension in the previous section of this document—non-capturing parentheses: (?:…). The remainder are listed in the chart below, and discussed in detail afterward.

Extension	Meaning
(?:…)	Cluster-only parentheses, no capturing
(?#…)	Comment, discard all text between the parens
(?imsx-imsx)	Enable/disable pattern modifiers
(?imsx-imsx:…)	Cluster-only parens with modifiers
(?=…)	Positive lookahead assertion
(?!…)	Negative lookahead assertion
(?<=…)	Positive lookbehind assertion
(?<!…)	Negative lookbehind assertion
(?()…|…)	Match with if-then-else
(?()…)	Match with if-then

Extension	Meaning
(?>…)	Match non-backtracking subpattern (“once-only”)
(?R)	Recursive pattern

Comments

The sequence `(?#` marks the start of a comment which continues up to the next closing parenthesis. Nested parentheses are not permitted. The characters that make up a comment play no part in the pattern matching at all.

Search for: `foo(?# Hello, this is a comment)bar`
Will match: foobar

Pattern Modifiers

The settings for case sensitivity, multi-line matching, whether the dot character can match returns, and “extended syntax” can be turned on and off within a pattern by including sequences of letters between “(?” and “)”.

Modifier	Meaning	Default
`i`	case insensitive	according to Case Sensitive checkbox in Find & Replace dialog
`m`	allow ^ and $ to match at \r	on
`s`	allow . to match \r	off
`x`	ignore most white space and allow inline comments in grep patterns	off

i — By default, BBEdit obeys the “Case Sensitive” checkbox in the Find & Replace dialog (or the corresponding property of the search options when using the scripting interface). The `(?i)` option overrides this setting.

m — By default, BBEdit’s grep engine will match the ^ and $ metacharacters after and before returns, respectively. If you turn this option off with `(?-m)`, ^ will only match at the beginning of the document, and $ will only match at the end of the document. (If that is what you want, however, you should consider using the new \A, \Z, and \z metacharacters instead of ^ and $.)

s — By default, the magic dot metacharacter . matches any character except return (“\r”). If you turn this option on with `(?s)`, however, dot will match *any* character. Thus, the pattern `(?s).+` will match an entire document.

x — When turned on, this option changes the meaning of most whitespace characters (notably, tabs and spaces) and #. Literal whitespace characters are ignored, and the # character starts a comment that extends until a literal return or the “\r” escape sequence is encountered. Ostensibly, this option intends to let you write more “readable” patterns.

Perl programmers should already be familiar with these options, as they correspond directly to the -imsx options for Perl's m// and s/// operators. Unadorned, these options turn their corresponding behavior on; when preceded by a hyphen (-), they turn the behavior off. Setting and unsetting options can occur in the same set of parentheses.

Example	Effect
`(?imsx)`	Turn all four options on
`(?-imsx)`	Turn all four options off
`(?i-msx)`	Turn "i" on, turn "m", "s", and "x" off

The scope of these option changes depends on where in the pattern the setting occurs. For settings that are outside any subpattern, the effect is the same as if the options were set or unset at the start of matching. The following patterns all behave in exactly the same way:

```
(?i)abc
a(?i)bc
ab(?i)c
abc(?i)
```

In other words, all four of the above patterns will match without regard to case. Such "top level" settings apply to the whole pattern (unless there are other changes inside subpatterns). If there is more than one setting of the same option at the top level, the right-most setting is used.

If an option change occurs inside a subpattern, the effect is different. An option change inside a subpattern affects *only* that part of the subpattern that follows it, so, if the "Case Sensitive" checkbox is turned on:

Search for: `(a(?i)b)c`
Will match: `abc` *or* `aBc`

and will not match anything else. (But if "Case Sensitive" is turned off, the "`(?i)`" in the above pattern is superfluous and has no effect.) By this means, options can be made to have different settings in different parts of the pattern. Any changes made in one alternative do carry on into subsequent branches within the same subpattern. For example:

Search for: `(a(?i)b|c)`

matches "ab", "aB", "c", and "C", even though when matching "C", the first branch is abandoned before the option setting.

These options can also be set using the clustering (non-capturing) parentheses syntax defined earlier, by inserting the option letters between the "?" and ":". The scope of options set in this manner is limited to the subpattern contained therein. Examples:

Search for: `(?i:saturday|sunday)`
Will match: `SATURDAY` *or* `Saturday` *or* `SUNday` (and so on)

Search for: `(?i:foo)(?-i:bar)`
Will match: `foobar` *or* `FOObar`
Will not match: `FOOBAR` *or* `fooBAR`

Positional Assertions

Positional assertions "anchor" a pattern, without actually matching any characters. Simple assertions have already been described: those which are invoked with the escape sequences \b, \B, \A, \Z, \z, ^ and $. For example, the pattern `\bfoo\b` will only match the string "foo" if it has word breaks on both sides, but the \b's do not themselves match any characters; the entire text matched by this pattern are the three characters "f", "o", and "o".

Lookahead and lookbehind assertions work in a similar manner, but allow you to test for arbitrary patterns to anchor next to. If you have ever said to yourself, "I would like to match 'foo', but only when it is next to 'bar'," lookaround assertions fill that need.

Positive lookahead assertions begin with "`(?=`", and negative lookahead assertions begin with "`(?!`". For example:

```
\w+(?=;)
```

will match any word followed by a semicolon, but the semicolon is not included as part of the match.

```
foo(?!bar)
```

matches any occurrence of "foo" that is *not* followed by "bar". Note that the apparently similar pattern:

```
(?!foo)bar
```

does not find an occurrence of "bar" that is preceded by something other than "foo"; it finds any occurrence of "bar" whatsoever, because the assertion `(?!foo)` is always true when the next three characters are "bar". A lookbehind assertion is needed to achieve this effect.

Positive lookbehind assertions start with "`(?<=`", and negative lookbehind assertions start with "`(?<!`". For example:

```
(?<!foo)bar
```

does find an occurrence of "bar" that is not preceded by "foo". The contents of a lookbehind assertion are restricted such that all the strings it matches must have a fixed length. However, if there are several alternatives, they do not all have to have the same fixed length. Thus

```
(?<=Martin|Lewis)
```

is permitted, but

```
(?<!dogs?|cats?)
```

causes an error. Branches that match different length strings are permitted only at the top level of a lookbehind assertion. This is different compared with Perl 5.005, which requires all branches to match the same length of string. An assertion such as

```
(?<=ab(c|de))
```

is not permitted, because its single top-level branch can match two different lengths, but it is acceptable if rewritten to use two top-level branches:

```
(?<=abc|abde)
```

The implementation of lookbehind assertions is, for each alternative, to temporarily move the current position back by the fixed width and then try to match. If there are insufficient characters before the current position, the match is deemed to fail. (Lookbehinds in conjunction with non-backtracking [a.k.a. "once-only"] subpatterns can be particularly useful for matching at the ends of strings; an example is given in the section on once-only subpatterns below.)

Several assertions (of any sort) may occur in succession. For example,

```
(?<=\d{3})(?<!999)foo
```

matches "foo" preceded by three digits that are not "999". Notice that each of the assertions is applied independently at the same point in the subject string. First there is a check that the previous three characters are all digits, and then there is a check that the same three characters are not "999". This pattern does not match "foo" preceded by six characters, the first of which are digits and the last three of which are not "999". For example, it does not match "123abcfoo". A pattern to do that is:

```
(?<=\d{3}...)(?<!999)foo
```

This time the first assertion looks at the preceding six characters, checking that the first three are digits, and then the second assertion checks that the preceding three characters are not "999". Assertions can be nested in any combination. For example,

```
(?<=(?<!foo)bar)baz
```

matches an occurrence of "baz" that is preceded by "bar" which in turn is not preceded by "foo", while

```
(?<=\d{3}(?!999)...)foo
```

is another pattern which matches "foo" preceded by three digits and any three characters that are not "999".

Assertion subpatterns are not capturing subpatterns, and may not be repeated, because it makes no sense to assert the same thing several times. If any kind of assertion contains capturing subpatterns within it, these are counted for the purposes of numbering the capturing subpatterns in the whole pattern. However, substring capturing is carried out only for positive assertions, because it does not make sense for negative assertions.

Conditional Subpatterns

Conditional subpatterns allow you to apply "if-then" or "if-then-else" logic to pattern matching. The "if" portion can either be an integer between 1 and 99, or an assertion. The two forms of syntax are:

if-then: `(?(condition)yes-pattern)`
if-then-else: `(?(condition)yes-pattern|no-pattern)`

If the condition evaluates as true, the "yes-pattern" portion attempts to match. Otherwise, the "no-pattern" portion does (if there is a "no-pattern").

If the "condition" text between the parentheses is an integer, it corresponds to the backreferenced subpattern with the same number. (Do not precede the number with a backslash.) If the corresponding backreference has previously matched in the pattern, the condition is satisfied. Here's an example of how this can be used. Let's say we want to match the words "red" or "blue", and refer to whichever word is matched in the replacement pattern. That's easy:

```
(red|blue)
```

To make it harder, let's say that if (and only if) we match "blue", we want to optionally match a space and the word "car" if they follow directly afterward. In other words, we want to match "red", "blue", or if possible, "blue car", but we do not want to match "red car". We cannot use the pattern:

```
(red|blue)( car)?
```

because that will match "red car". Nor can we use:

```
(red|blue car|blue)
```

because in our replacement pattern, we want the backreference to only contain "red" or "blue", without the " car". Using a conditional subpattern, however, we can search for:

```
((blue)|(red))(?(2) car)?
```

Here's how this pattern works. First, we start with "`((blue)|(red))`". When this subpattern matches "blue", \1 and \2 are set to "blue", and \3 is empty. When it matches "red", \1 and \3 are set to "red", and \2 is empty.

Next comes the conditional subpattern "`(?(2) car)?`". The conditional test is on "2", the second backreferenced subpattern: if \2 is set, which in our case means it has matched the word "blue", then it will try to match " car". If \2 is not set, however, the entire conditional subpattern is skipped. The question mark at the end of the pattern makes this conditional match optional, even if \2 is set to "blue".

Here's an example that uses an assertion for the condition, and the if-then-else form. Let's say we want to match a run of digits of any length, followed by either " is odd" or " is even", depending on whether the matched digits end with an odd or even digit.

```
\d+(?(?<=[13579]) is odd| is even)
```

This pattern starts with "\d+" to match the digits. Next comes a conditional subpattern, with a positive lookbehind assertion as the condition to be satisfied. The lookbehind assertion is true only if the last character matched by \d+ was also in the character class [13579]. If that is true, we next try to match " is odd"; if it is not, we try to match " is even". Thus, this pattern will match "123 is odd", "8 is even", and so on, but will not match "9 is even" or "144 is odd".

Once-Only Subpatterns

With both maximizing (greedy) and minimizing (non-greedy) repetition, failure of what follows normally causes the repeated item to be reevaluated to see if a different number of repeats allows the rest of the pattern to match. Sometimes it is useful to prevent this, either to change the nature of the match, or to cause it to fail earlier than it otherwise might, when the author of the pattern knows there is no point in carrying on.

Consider, for example, the pattern "\d+foo" when matching against the text "123456bar".

After matching all 6 digits and then failing to match "foo", the normal action of the grep engine is to try again with only 5 digits matching the \d+ item, and then with 4, and so on, before ultimately failing. Once-only subpatterns provide the means for specifying that once a portion of the pattern has matched, it is not to be reevaluated in this way, so the matcher would give up immediately on failing to match "foo" the first time. The notation is another kind of special parenthesis, starting with "(?>", as in this example:

```
(?>\d+)bar
```

This kind of parentheses "locks up" the part of the pattern it contains once it has matched, and a failure further into the pattern is prevented from backtracking into it. Backtracking past it to previous items, however, works as normal.

In most situations, such as in the example above, the time saved by using once-only subpatterns is insignificant—a few small fractions of a second, at most. With some complicated grep patterns or with humongous lines of text, however, you can save tremendous amounts of time using once-only subpatterns.

Once-only subpatterns are not capturing subpatterns. Simple cases such as the above example can be thought of as a maximizing repeat that must swallow everything it can. So, while both \d+ and \d+? are prepared to adjust the number of digits they match in order to make the rest of the pattern match, (?>\d+) can only match an entire sequence of digits.

Once-only subpatterns can be used in conjunction with lookbehind assertions to specify efficient matching at the end of a line of text. Consider a simple pattern such as:

```
abcd$
```

when applied to a long line of text which does not match (in other words, a long line of text that does not end with "abcd"). Because matching proceeds from left to right, the grep engine will look for each "a" in the subject and then see if what follows matches the rest of the pattern. If the pattern is specified as:

```
^.*abcd$
```

the initial `.*` matches the entire line at first, but when this fails (because there is no following "a"), it backtracks to match all but the last character, then all but the last two characters, and so on. Once again the search for "a" covers the entire string, from right to left, so we are no better off. However, if the pattern is written as:

```
^(?>.*)(?<=abcd)
```

there can be no backtracking for the `.*` item; it can match only the entire line. The subsequent lookbehind assertion does a single test on the last four characters. If it fails, the whole match fails immediately. For long strings, this approach makes a significant difference to the processing time.

When a pattern contains an unlimited repeat inside a subpattern that can itself be repeated an unlimited number of times, the use of a once-only subpattern is the only way to avoid some failing matches taking a very long time (literally millions or even billions of years, in some cases!). The pattern:

```
(\D+|<\d+>)*[!?]
```

matches an unlimited number of substrings that either consist of non-digits, or digits enclosed in <>, followed by either ! or ?. When it matches, it runs quickly. However, if it is attempts to match this line of text:

```
aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa
```

it takes a long time before reporting failure. So long, in fact, that it will effectively "freeze" BBEdit. This is not really a crash, per se, but left to run on its own, it might take years before it finally fails. (We are not sure, frankly, because much like determining how many licks it takes to get to the center of a Tootsie Pop, we do not feel like waiting long enough to find out.)

The reason this takes so long to fail is because the string can be divided between the two repeats in a large number of ways, and all have to be tried before the grep engine knows for certain that the pattern will not match. (The example used `[!?]` rather than a single character at the end, because both PCRE and Perl have an optimization that allows for fast failure when a single character is used. They remember the last single character that is required for a match, and fail early if it is not present in the string.) If the pattern is changed to

```
((?>\D+)|<\d+>)*[!?]
```

sequences of non-digits cannot be broken, and failure happens quickly.

Recursive Patterns

Consider the problem of matching a string in parentheses, allowing for unlimited nested, balanced parentheses. Without the use of recursion, the best that can be done is to use a pattern that matches up to some fixed depth of nesting. It is not possible to handle an arbitrary nesting depth. Perl 5.6 has provided an experimental facility that allows regular expressions to recurse (among other things). It does this by interpolating Perl code in the expression at run time, and the code can refer to the expression itself. Obviously, BBEdit's grep engine cannot support the interpolation of Perl code. Instead, the special item `(?R)` is provided for the specific case of recursion. The following recursive pattern solves the parentheses problem:

```
\(((?>[^()]+)|(?R))*\)
```

First it matches an opening parenthesis. Then it matches any number of substrings which can either be a sequence of non-parentheses, or a recursive match of the pattern itself (that is, a correctly parenthesized substring). Finally there is a closing parenthesis.

This particular example pattern contains nested unlimited repeats, and so the use of a once-only subpattern for matching strings of non-parentheses is important when applying the pattern to strings that do not match. For example, when it tries to match against this line of text:

```
(aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa()
```

it yields "no match" quickly. However, if a once-only subpattern is not used, the match runs for a very long time indeed because there are so many different ways the + and * repeats can carve up the subject, and all have to be tested before failure can be reported.

CHAPTER

9

Browsers

Browsers are special kinds of windows that let you see a lot of information about files at once. Browsers typically have two panes: one pane lets you select a file, the other displays detailed information about the file (often its contents). If you have used the Batch Find option in a multi-file search, you have already seen an example of a BBEdit browser.

In this chapter

Browser Overview **145**
List Pane – 145 • *Status Bar* – 146
Text View Pane – 146 • *Splitter* – 146
Disk Browsers. **146**
Using Disk Browsers – 147
Using the List Pane in Disk Browsers – 148
Using the Text Pane in Disk Browsers – 148
Search Results Browsers **149**
Error Results Browsers **150**

Browser Overview

All BBEdit browsers share the same basic structure and behavior. All browsers have a status bar, a file list, and a text pane.

List Pane

The top pane of a browser lists the items available in the browser. This pane shows different information for different kinds of browsers:

Browser	File List pane contains
Disk browser	Files and folders that BBEdit can open
Search results	File and line number of each match
Error results (or) general results	File, line number, and status message for each condition

You can open both files and folders from the list pane. When you double-click a folder name, BBEdit replaces the file list pane with the contents of the folder. When you double-click a file name, BBEdit opens the file in an editing window. If the file list pane also included a line number, BBEdit scrolls to that line.

Controls above the list may allow you to determine what kinds of items are displayed in the list. For example, in disk browsers, there is a pop-up menu that lets you choose to display text files, all files, or other types of files, and another that lets you return the browser to a parent directory of the current folder. In error browsers, checkboxes allow you to hide or show all errors, warnings, or notes.

For results browsers, BBEdit can either show an error hierarchy (where all the errors associated with a particular file are grouped under that file, using disclosure triangles similar to those in the Finder's list views to reveal or hide the error list), or a flat listing showing each individual error encountered on a separate line. You can choose which of these display methods to use by default in the Browser Display preferences. To remove items from the display list, select them and press the Delete key, or choose Clear from the Edit menu.

Status Bar

The browser status bar is like the status bar in editing windows. Some browsers have additional buttons and controls in the status area as well.

These standard items—the pencil icon; the Function, Text Options, Mark, Path pop-up menus; and the Projector and Info buttons—should already be familiar to you, since they appear on BBEdit document windows by default. See "Window Anatomy" in Chapter 4 for an explanation of these standard BBEdit functions.

Text View Pane

When you click an item in the list pane, BBEdit displays its contents in the text view pane. If you click a folder, BBEdit lists the names of the files in the folder. If you click a file name, BBEdit displays the contents of the file.

When the current focus is in the bottom pane, the space bar acts like the "Page Down" key, and Shift-space acts as "Page Up."

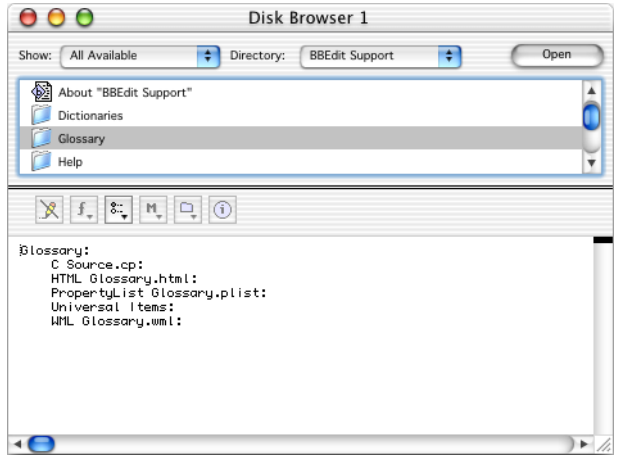
Splitter

You can change the size of the file list pane or the text view pane by dragging the double line that separates them. Double-clicking on the splitter bar will collapse the text view pane completely, and double-clicking on it again (in the bottom of the browser window) will restore the text pane to its previous proportions.

Disk Browsers

Use a disk browser to explore the contents of a disk or a folder without opening each file one at a time.

To open a disk browser, pull down the File menu and choose Disk Browser from the New submenu. BBEdit opens a new disk browser that starts at the desktop:



The file list pane displays all of the disks on the Finder desktop. If you click a disk in the file list pane, the text pane displays all the items on the disk that BBEdit can open.

Note You can also open a disk browser starting at any particular folder, by dragging that folder onto BBEdit's icon in the Finder.

Using Disk Browsers

The controls in the disk browser let you open files and folders, limit the kinds of files to show in the list pane, and navigate through your disks and folders.

Show Pop-Up Menu

The pop-up menu on the upper-left section of the list pane lets you specify the kinds of files you want BBEdit to list in the browser. You can select "All Readable Files," meaning all types of files BBEdit recognizes that it can open, or "All Files" which will display every file present in a folder regardless of type or kind. You can also select from one of the more specific types listed below: text files, PICT files, QuickTime movies, QuickTime images, BBEdit file groups, MacPerl runtimes (stand-alone Perl applications), and shell worksheets.

Directory Pop-Up Menu

This pop-up menu always shows the currently selected folder. When a disk browser is first opened, this will usually be the Desktop folder—that is, the "invisible" folder in which all items that appear on the desktop are stored. If you have opened any volume or folder within a volume, the current folder will be shown here instead. On Mac OS X, new disk browsers will open with a view of the current user's home folder.

You can use this menu to "back out" of any folder you are currently in to a higher-level folder (as you can in the Finder). You can also choose the Other… option to get a folder selection dialog from which you can choose any folder on any currently mounted volume.

Open Button

Clicking the Open button in the status bar opens the selected item, or you can double-click on the item. If you open a folder, BBEdit displays the contents of that folder in the file list pane. If you click one or more files, BBEdit opens those files into editing windows.

Tip Hold down the Option key as you Open or double-click on a file name to open the file with the application that created it.

Using the List Pane in Disk Browsers

The list pane of a disk browser displays disks, files, and folders. When you are at the desktop level, the list shows all mounted volumes and the files and folders on the Desktop.

When you click a folder or disk, BBEdit displays the names of all the files it can open in the text pane. (The names listed in the text pane cannot be double-clicked to open them. You can however select a name and use the Open Selection command to open that file.) When you click a file name, BBEdit displays the contents of the file in the text pane.

To open a folder or disk and display its contents in the file list pane, do one of the following:

- double-click it
- select it and click Open in the status bar
- select it and press Command-Down Arrow

To go up one level to the enclosing folder or disk, do one of the following:

- choose the enclosing folder from the directory pop-up menu
- press Command-Up Arrow

new in 7.0 When the list pane has input focus, the browser window's AppleScript "selection" property will return a list of the files currently selected. See "BBEdit and AppleScript" on page 234 for further details.

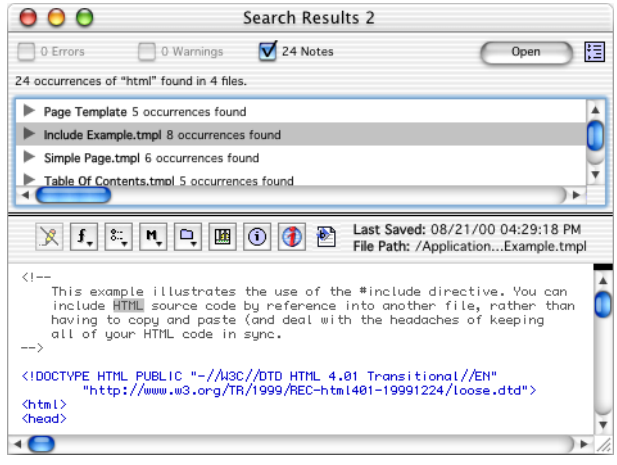
Using the Text Pane in Disk Browsers

When you select a folder or disk in the file list pane, BBEdit displays the names of all the files and folders contained in that folder or disk in the text pane. When you click on a file name, BBEdit displays the contents of the file in the text pane if the file is of a type that BBEdit recognizes ("TEXT", "utxt", or "UTF8").

You can search the contents of the text pane with the Find command or with the Quick Search window, and you can copy text from the text pane. You cannot edit a file's contents in the text pane. To edit a file, use the Open button in the status bar to open it in an editing window.

Search Results Browsers

If you selected the Batch Find option when performing a multi-file search, BBEdit displays every occurrence of the search string in the searched files in a search results browser.



The items at the top of the window tell you how many matches BBEdit found in the set of files you specified, as well as whether any error conditions or warnings were generated during the search. The list pane lists each line that contains the matched text. (Depending on how you have configured BBEdit, the list may be arranged hierarchically, with every match attached to the file that contains it in a Finder-like list view, or they may be listed one after the other in a simple flat list.) Every match is identified by file and line number. To choose whether to display the search errors, warnings, and results, use the checkboxes at the top of the browser.

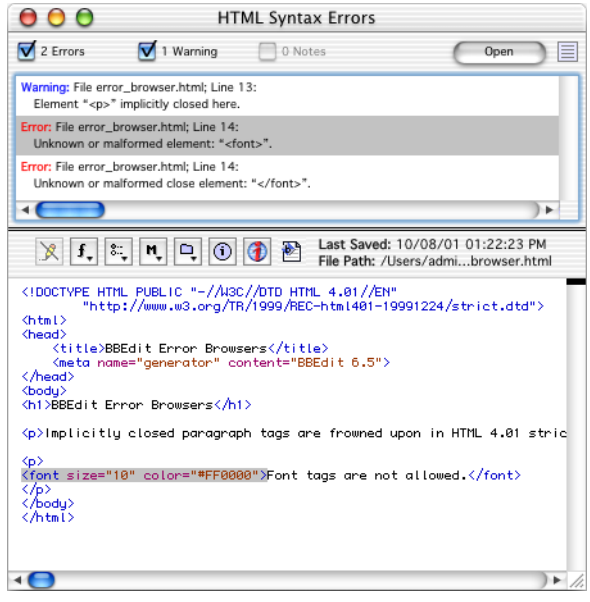
The Open button opens the selected items using BBEdit. To open the selected items using the Finder, hold down the Option key while clicking the Open button.

To see the contents of a file, click a line in the list of matched searches. The part of the file that contains the search string appears in the lower pane. You cannot edit text in a search results browser. To edit the file, double-click the line that contains the match you want to edit.

After you have opened the file, you can use the Find Again, Replace, Replace All, and Replace & Find Again commands in the Search menu to continue searching it, as if you had chosen a File by File search. See Chapter 7 for more information on searching.

Error Results Browsers

When you use the HTML syntax checker, link checker, or update tool, BBEdit will open an error results browser to display any errors generated by the command. BBEdit will also open an error results browser to list compilation errors generated by commands issued to CodeWarrior from the Compiler menu, or errors generated by Perl scripts.



Each entry in the list pane corresponds to an error, warning, or note. You can use the checkboxes for each type of item to suppress or display the associated results as desired.

If you click on a entry in the file list, BBEdit displays the location of the error. If you double-click an item in the file list, BBEdit opens the associated file into an editing window and selects the section of text related to the error.

CHAPTER

10 Preferences

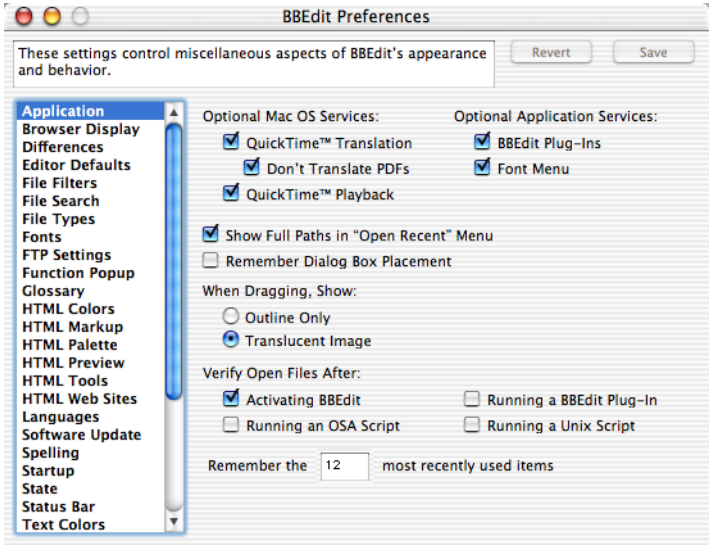
You can use the Preferences command to customize much of BBEdit's behavior. You can decide which windows are open when you launch BBEdit, set the default options for windows, set the default options for searches, and so on. This chapter describes BBEdit's extensive preference options.

In this chapter

The Preferences Command 152
Application Preferences 153
Browser Display Preferences 154
Differences Preferences 155
Editor Defaults Preferences 155
File Filters Preferences 157
File Search Preferences 157
File Types Preferences 159
Fonts Preferences 159
FTP Settings Preferences 160
Function Popup Preferences 161
Glossary Preferences 162
HTML Colors Preferences 162
HTML Markup Preferences 163
HTML Palette Preferences 164
HTML Preview Preferences 164
HTML Tools Preferences 165
HTML Web Sites Preferences 166
Languages Preferences 168
Software Update Preferences 169
Spelling Preferences 169
Startup Preferences 170
State Preferences 171
Status Bar Preferences 172
Text Colors Preferences 174
Text Editing Preferences 174
Text Encodings Preferences 176
Text Files: Opening Preferences 177
Text Files: Saving Preferences 179
Text Printing Preferences 179
Text Search Preferences 181
Tools Preferences 182
Unix Scripting Preferences 183
Windows Preferences 183

The Preferences Command

To open the Preferences window on Mac OS X, choose the Preferences command from the BBEdit menu. On Mac OS 9, choose Preferences from the Edit menu.



The small text area at the top left of the Preferences window, next to the Revert and Save buttons, gives you a brief description of the contents of the currently displayed preference panel.

The list along the left side of the window lets you select the preference panel to use.

To save your preferences, click Save. To have BBEdit "back out" any unsaved changes you make while in the Preferences window, click Revert. Please note that Revert will only return settings that you have changed *since* the last Save operation to their saved condition; it does not restore default settings. To completely reset all preference settings to their default values, you must quit BBEdit, remove the existing BBEdit Prefs Data file from the BBEdit Preferences folder, and relaunch BBEdit to have it generate a fresh set of preferences. Chapter 2 contains details about the organization of BBEdit's preference files.

Note BBEdit's Preferences window is non-modal; you can leave it open as you work. It does not automatically close when you click Save or Revert. You can of course close it with the close box or by choosing Close from the File menu.

The following sections describe each of the preference panels in detail.

Application Preferences

The Application preferences control which application and system services BBEdit uses, when open files are verified, and various other global settings.

Note Previous versions of BBEdit allowed Navigation Services and Appearance Manager support to be turned off. Starting with BBEdit 6.5, these two services are no longer optional.

Optional Mac OS Services

QuickTime™ Translation

If you mark this checkbox and have a recent version of QuickTime installed, BBEdit will ask QuickTime if it recognizes any files that BBEdit does not. If QuickTime recognizes the file as one it can display, BBEdit will open it for viewing; otherwise, the file will be opened as "raw" text. This option is on by default.

If the supplemental option Don't Translate PDFs is checked, BBEdit will not attempt to apply QuickTime translation to PDF files. This option is on by default.

QuickTime™ Playback

This checkbox controls whether BBEdit opens QuickTime movies for playback in a movie window or just opens them as text data in an editing window. The default is to recognize QuickTime movies and display them with a player. Changes to this preference take effect immediately.

Optional Application Services

BBEdit Plug-ins

When this option is selected, BBEdit makes the Tools menu available in the menu bar so that you can use BBEdit plug-ins (small add-on programs that add functionality to BBEdit). The factory-supplied plug-ins are part of the BBEdit application. Third-party BBEdit plug-ins are in the BBEdit Support folder. See Chapter 2 to learn more about the organization of the BBEdit Support folder, or Chapter 15 for information about the factory-supplied plug-ins.

Font Menu

Mark this checkbox to display a Font menu in BBEdit's menu bar. Since BBEdit edits plain text, most users will not need to change the font often. However, if you frequently edit text in more than one language, you may find this option convenient.

Show Full Paths in "Open Recent" Menu

Mark this checkbox to always show the complete pathname of recently opened files, rather than just their names, in BBEdit's Open Recent submenu. If a recent file is missing, only its name will appear, regardless of this setting. Also, if two or more files have identical filenames, their complete pathnames will always be shown to prevent ambiguity, regardless of this setting.

Remember Dialog Box Placement

Mark this checkbox to have BBEdit remember the location of the Find & Replace dialog, and most other dialogs between sessions. If you turn the checkbox off, BBEdit will open dialogs at a default location every time you use them.

When Dragging, Show

These radio buttons control the way selected text is displayed while tracking mouse movements during a drag-and-drop operation: choose Outline Only to have the selection displayed as an outline, or Translucent Image to have the selection displayed as visible, translucent text.

Verify Open Files After

If you frequently make changes to files with another program while they are open in BBEdit, or you often edit shared files that might be changed by someone else, you may want to mark one or more of these checkboxes. If the option for Activating BBEdit is checked, for instance, BBEdit will check the modification date of each open document every time you switch to BBEdit, alerting you if any changes have been made to the file while BBEdit was not the frontmost application. Similar functions are available to perform this check after running an OSA script, a BBEdit plug-in, or a Unix (on Mac OS X) or Perl script (on Mac OS 9).

Remember the most recently used items

new in 7.0.2

This text field lets you choose how many files appear on the Open Recent sub-menu of the File menu, and how many folders appear on the folder search pop-up menu in the Find & Replace dialog and on the Find Differences folder lists.

Browser Display Preferences

The Browser Display preferences control the initial appearance of BBEdit's built-in browsers for search results, compile errors, disk contents, and so forth.

Results Lists

For search results browsers, you can have BBEdit display either a hierarchical listing (where all the matches associated with a particular file are grouped under that file, using disclosure triangles similar to those in the Finder's list views to reveal or hide the match list) or a flat listing showing each individual match encountered on a separate line. In the former case, you can also tell BBEdit to expand all the file nodes initially, by checking Expand Listing. This preference also governs the default display of hierarchical or flat error listings in error browsers.

Show File Icons

When this option is selected, browsers that display files, folders, and disk volumes will also display small icons for the items. When this option is deselected, the browsers list only the names of files and folders.

Differences Preferences

The Differences preferences control the way the Find Differences command places its windows.

Arrange Windows On

The Arrange Windows radio buttons let you choose which screen BBEdit uses to display Differences windows. You can choose the main screen, the largest screen, or the smallest screen.

When you mark the Use Two Screens checkbox, BBEdit displays the Differences window on the second screen. This option gives you the largest view of the items you are comparing.

Keep Windows Arranged provides control over whether BBEdit rearranges the windows being compared when you click a difference item.

Differences Window Placement

The two Above/Beneath Compared Files radio buttons let you choose whether the differences window should be above or below the windows of the items you are comparing.

Arrange Windows

You can specify whether differences windows are arranged left to right or top to bottom using the Arrange Windows radio buttons. (Previously, BBEdit always arranged differences windows left to right.

Multi-File Differences

When comparing multiple files, the Show File Icons checkbox determines whether the files' Finder icons are shown in the Differences window.

Editor Defaults Preferences

The Editor Defaults preferences control the behavior of newly created document windows and documents without saved state information. Many of the preferences in this panel are the same as those in the Text Options dialog and in the Text Options pop-up menu (left) in the status bar. The difference is that the text options control the behavior of the active window, while the Editor Defaults preferences control the behavior of new windows.

Note Many of the keyboard behavior settings formerly located in this panel have moved to the Text Editing panel.

Auto-Indent

When this option is selected, pressing the Return key in new windows automatically inserts spaces or tabs to indent the new line to the same level as the previous line.

Tip To temporarily invert the sense of the Auto Indent option while typing, hold down the Option key as you press the Return key.

Balance While Typing

When this option is selected, BBEdit flashes the matching open parenthesis, brace, bracket, or curly quote when you type a closing one. This option is useful when you are editing source files, to ensure that all delimiters are balanced.

Smart Quotes

When this option is on, BBEdit automatically substitutes curly (or typographer's) quotes (“ ” ‘ ’) for straight quotes (" ').

Tip To type a straight quote when this option is selected (or to type a curly quote when the option is deselected), hold down the Control key as you type a single or double quote.

Note You should avoid using Smart Quotes when editing HTML documents.

Auto-Expand Tabs

When this option is selected, BBEdit inserts an appropriate number of spaces instead of a tab character every time you press the Tab key.

Show Invisibles

This option shows or hides non-printing characters in the window. Select this option when you want to see line breaks, tabs, and gremlins (invisible characters). BBEdit uses these symbols to represent non-printing characters:

Symbol	Meaning
∆	tab
◊	space
•	non-breaking space
¬	line break
¶	page break
¿	other non-printing characters

Show Spaces

If this setting is selected (and Show Invisibles is active), BBEdit will display placeholder characters for spaces. Deselect this option to suppress the display of spaces, which will reduce clutter when you are displaying invisible characters.

Note Non-breaking spaces (typed by pressing Option-space) will not be displayed with a placeholder.

Syntax Coloring

When this option is selected and the editing window contains a document in one of the languages that BBEdit knows how to parse, BBEdit displays keywords and other language elements in color.

The languages that BBEdit knows about are those listed in the Languages panel of the Preferences window. Remember that the document must be saved to a file and that the file must end with a suffix (extension) that maps to a language that BBEdit can parse.

You can select the colors that BBEdit uses for syntax coloring in the Text Colors panel of the Preferences window.

Soft Wrap Text

When this option is selected, BBEdit soft-wraps the text in the file to the right margin that you choose: the Philip bar, the window width, or a specific number of characters, as selected by the options below the checkbox. (The Philip bar is the light gray line in the status bar that indicates the right edge of the usable viewing area on a 9-inch classic Mac monitor.)

Note The Smart Editing option has been removed starting with BBEdit 6.5. (It wasn't smart enough for us.)

File Filters Preferences

The File Filters preference panel lists all the file filters you have defined for multi-file searching. You can create, edit, rename, or delete filters using the buttons on the right side of this panel. For more information on creating and using file filters, see Chapter 7.

Note If you have the Preferences window open, you will not be able to add filters in the Find & Replace dialog. To work around this, close the Preferences window before using the Find & Replace dialog to add new filters.

File Search Preferences

The File Search preferences control the way BBEdit searches for files when you use the Open File by Name or Open Selection command from the File menu.

Find All Matching Files

When this option is selected, BBEdit looks for all the files that match the entered or selected text. Otherwise BBEdit stops looking as soon as it finds the first file that matches the selected name.

Skip (...) Folders

When this option is selected, BBEdit does not search folders whose names are enclosed in parentheses.

Follow Folder Aliases

When this option is selected, BBEdit follows folder aliases when searching for a file matching the specified name. Otherwise, BBEdit ignores folder aliases and searches only regular folders. If the Follow to Remote Volumes option is on, BBEdit will follow folder aliases even if the target folder is on a file server.

Note Using this option can substantially increase the length of time required to perform a search.

Default <...> Directory

The path box displays the default path that BBEdit uses to locate files whose names are enclosed in angle brackets when you use the Open File by Name or Open Selection command. To change the default search directory, do one of the following:

- Click the Choose button and select the folder from the directory dialog box.
- Drag the icon of the folder to the path box.

Note On Mac OS X, the default value for the Default <…> Directory setting is the current user's login folder.

Unix Search Paths

Note The Unix Search Paths options are available only when BBEdit is running on Mac OS X.

Unix search paths are designed to make it easier to work with Unix source code, which uses include statements of the form

```
#include <xxx/yyy.h>
```

As a more concrete example: the canonical Unix include directory is "/usr/include". It contains its own subdirectories, but since Unix command-line compilers do not usually do recursive searches, you need to qualify the include file's name if you want to include a file out of one of the subdirectories:

```
#include <sys/ioctl.h>
```

With the Unix Search Paths settings, you can add "/usr/include" to the list (actually, that is one of the factory defaults). When you select "sys/ioctl.h" and choose Open Selection, BBEdit attempts to construct a file path using each of the directories shown in the Unix Search Paths list. If one resolves to a file, BBEdit will open the resulting file. Thus, the partially qualified selection "sys/ioctl.h" resolves to

```
/usr/include/sys/ioctl.h
```

and the file opens.

File Types Preferences

The File Types preferences let you define the creator signatures of the files that BBEdit can save. By default, when BBEdit saves a new file, it sets the type of the file to 'TEXT' and sets its creator to 'R*ch'. You can choose a different creator by selecting it from the File Creator pop-up menu in the Save Options dialog, reached via the Options button in the main Save dialog. The File Types preference panel specifies the list of creator signatures that will appear in this pop-up menu.

The Find All button lets you easily add all the applications you have that are capable of opening text files. This may be a long list, so you may prefer to add only the applications you actually use.

To set the default creator signature:

1. **Select an application from the list.**
2. **Click Make Default.**

   A check mark appears next to the default creator. When saving files, BBEdit will save new files with this creator signature unless you choose a different one. When saving a file that already exists, BBEdit never changes the creator.

To add a new application to the list:

1. **Click Add.**
2. **Select an application from the Open dialog box.**

To delete an item from the list:

1. **Select an application from the list.**
2. **Click Remove.**

Fonts Preferences

The Fonts preference panel displays a list of the text encodings you can use with BBEdit and the default font you want to use with each encoding.

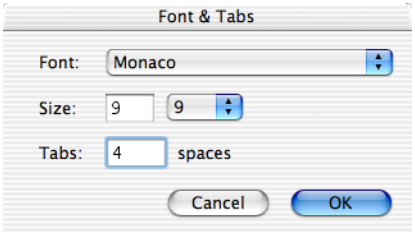
On many systems, only the Roman script will be supported. (The Roman script is used for English and many European languages.) If you have additional Language Kits installed or are running a non-English version of Mac OS, other scripts may be available.

Note This list displays every encoding supported by the Mac OS. Encodings with list entries displayed in normal text are installed and available on your Macintosh. Encodings whose list entries are dimmed represent script systems that are not installed on your Macintosh.

To choose the default text encoding for new documents, select the desired encoding in the list and click the Make Default button.

Note If a document does not contain any script or font information, BBEdit will assume it contains Roman text.

To choose the default font, font size, and tab stop spacing for a particular encoding, click Set Font & Tabs. The Font & Tabs dialog box appears.



You can choose the desired font and font size using controls in this dialog. The font should be appropriate to the encoding selected; for example, you should not choose Monaco as the font to use for Japanese text.

You can also tell BBEdit how many spaces occur between each tab stop. Individual documents may override these settings if they contain appropriate state information. (See Chapter 3 for more details on document states.) The settings you choose here are defaults that BBEdit uses for new windows and for documents with no saved state information.

FTP Settings Preferences

The FTP Settings preferences let you change the default settings of some options in the Open from FTP Server and Save to FTP Server dialogs.

Remember Passwords

Mark this checkbox to have BBEdit store the passwords for FTP sites.

Store Passwords in Keychain

This checkbox determines whether BBEdit stores saved FTP passwords in the Mac OS Keychain or whether they are stored in plain text in the bookmarks file.

Warning BBEdit is not a security program. If you choose not to use the Keychain, your stored FTP server passwords can be easily obtained by anyone with access to your computer. As an alternative, we suggest you consider using a secure bookmark storage application such as Web Confidential <http://www.web-confidential.com/>.

Include Passwords in Proxy URL Drags

Dragging the window proxy icon from an editing window corresponding to a file opened from an FTP server will drag that file's URL, rather than a representation of the local temporary file. To control whether the dragged URL includes the FTP account password, set the Include Passwords in Proxy URL Drags checkbox. This setting is turned off by default so that you do not accidentally create clippings containing passwords, as this may be a security risk.

List FTP Files on the "Open Recent" Menu

Mark this checkbox to show files opened from FTP sites on the Open Recent submenu of the File menu. (If this box is not checked, the Open Recent submenu lists only local files.)

Passive FTP

Mark this checkbox to make passive FTP mode (where the server determines the port number for the FTP connection) the default. Use Passive FTP whenever possible.

Show Document Icons

Mark this checkbox to display icons for the files in the Open from FTP Server and Save to FTP Server dialogs. Since FTP servers do not provide Macintosh type and creator information, BBEdit determines the displayed icon based on the file's name suffix (.html, .sit, and so on). You may configure these suffix-to-type mappings via the Internet control panel on Mac OS 9. Mac OS X does not currently provide any direct interface to do so; however, you can use Internet Explorer's File Helper preferences for this purpose.

Show Files Starting with "."

The Unix convention for creating invisible or hidden files is to begin their names with a period. Often, configuration files and scripts (such as .newsrc or .login) begin with periods so that they do not clutter most directory listings. This setting is off by default, so that you will not see such files in FTP listings. To display them, mark this checkbox.

FTP Bookmarks

This list displays the bookmarks you have defined for FTP servers you use frequently with BBEdit. Click Add to create a new bookmark. Click Change to edit the selected bookmark, or Remove to delete it.

The Convert button allows you to choose a BBEdit 5.0 or 5.1 preferences file; if one is in the Preferences folder of your active system, BBEdit will automatically select that directory. BBEdit will read in the FTP bookmarks from the indicated file, add them to your current bookmark list, and sort the list again.

Note If you have the Preferences window open, you will not be able to add bookmarks in the Open From/Save To FTP Server dialogs. To work around this, close the Preferences window before using the FTP dialogs to add new bookmarks.

Function Popup Preferences

The Function Popup preferences control how the Function pop-up menu (left) in the status bar behaves.

Show Includes

When this option is selected, the Function pop-up menu includes the files named in #include directives.

Sort Items by Name

When this option is selected, the items in the Function pop-up menu are sorted by name. Otherwise, items in the pop-up menu appear in the same order as they appear in the file.

Show Function Prototypes

When this option is selected, the Function pop-up menu includes the names of function prototypes as well as the function definitions. Otherwise, the pop-up menu does not include entries for function prototypes.

Glossary Preferences

The Glossary preferences determine how BBEdit handles glossary entries.

Ignore Trailing CR

Click Ignore Trailing CR to have BBEdit strip off all white space from the end of a glossary entry when inserting it. This allows glossary entries to be inserted in the middle of a line, rather than as a block of text. You can use the #INLINE# cookie in a glossary entry to achieve the same effect, but only for that one entry.

Glossary Is Language Sensitive

Mark this checkbox to make BBEdit's glossary language-sensitive. If this feature is active, then each time you bring a window to the front, BBEdit automatically selects the first glossary set whose name maps to the same language as that window. For example, if the front window is an HTML document, BBEdit selects the first glossary set whose name ends in .html or .htm, or any of the other file suffixes mapped to HTML in the Languages preference panel. If there is no such entry, the active glossary set is unchanged.

HTML Colors Preferences

The HTML Colors preferences let you choose the appearance of the Web Safe Colors palette.

Color Palette Layout

You can choose from four layouts: 36 x 6 (a horizontal layout), 6 x 36 (a vertical layout), and two different VisiBone layouts, which organize the colors in a sort of circular layout that places similar colors close together. VisiBone 2 is a newer, more compact representation.

Color Swatch Size

You can choose the size of the swatches to be displayed in the palette. The default is Small.

Color Picker

The Color Picker option allows you to choose whether the color swatch buttons in various HTML dialogs use BBEdit's Web-safe pop-up menu (the factory default, and consistent with previous versions) or whether clicking the swatch brings up the standard Mac OS color picker dialog. Holding down the Option key on your keyboard while clicking the swatch reverses the sense of the preference.

HTML Markup Preferences

The HTML Markup preferences let you choose the format of tags generated by BBEdit's HTML tools.

HTML Tags

You can choose to generate uppercase or lowercase HTML tags, or to obtain this setting from a Dreamweaver HTML Source Profile.

You can choose a Dreamweaver HTML Source Profile to use by clicking the Choose button or by dragging a profile to the gray area from the Finder.

Quoting Tag Attributes

You may choose to always enclose tag attributes in quote marks or only to enclose attributes when the HTML standard would require it.

XML/HTML Markup Rules

If you are working with a document that does not contain a DOCTYPE specification or an XML declaration, you can specify whether BBEdit's HTML Tools should insert HTML or XML-style tags by selecting the appropriate radio button.

CSS Markup Formatting

The New Line Before Block Start checkbox controls how the CSS markup and formatting tools place the opening braces for block markup. If the checkbox is on, you get this style:

```
H1
{
    color: green;
}
```

If it is off, you get:

```
H1 {
    color: green;
}
```

The Put Simple Rules on One Line checkbox will format a single line of CSS like this:

```
H1 { color: green; }
```

The Allow Short Hex Color Notation checkbox controls whether hex color codes which can be expressed in a 3-digit collapsed form are inserted that way, or are inserted in the normal 6-digit format.

Close Current Tag

new in 7.0.4

This option allows you to control how the Close Current Tag command inserts the appropriate closing tag.

- "Context Sensitive" places the closing tag according to various contextual clues, such as whether the opening tag is a block element or an inline element, and whether there are line breaks in a block element's contents (if the tag is a block element). This is the factory default, and is consistent with previous versions of BBEdit (with some improvements to the context sensitivity).
- "Before Insertion Point" always places the closing tag immediately before the insertion point, thus leaving the insertion point outside of the tag container.
- "After Insertion Point" always places the closing tag immediately after the insertion point. This leaves the insertion point inside the tag container.

HTML Palette Preferences

The HTML Palette preferences determine how the HTML tools floating palette is displayed.

Palette Width

Choose normal or narrow buttons. The names of some buttons may be truncated when using narrow buttons.

Button Height

Choose normal or short buttons. Using short buttons allows the palette to require less space vertically.

Buttons on Main HTML Tools Palette

This list allows you to select which buttons are displayed on the palette. You can select a series of buttons by Shift-clicking their names in the display area, or a discontinuous group of buttons by Command-clicking each button name. After you make a selection, click Show or Hide to mark or unmark the selected buttons.

HTML Preview Preferences

The HTML Preview preferences tell BBEdit how you prefer to preview HTML documents.

When Previewing Files with Unsaved Changes

Choose to preview files with unsaved changes by saving the changes to a temporary file, by saving the current file just before previewing it, or by asking whether to save the file.

Note If you have set the Ask option, and choose Save when prompted, the file will be saved and then previewed; if you choose Don't Save, the file will be previewed from disk (without any unsaved changes).

Web Browsers Available for Preview

This list displays all Web browsers known to BBEdit. Browsers are shown by name and version number, in the same form in which they will appear in the Preview With submenu of the Markup menu. On Mac OS X, browsers that will invoke the Classic environment when launched are further labeled "(Classic)."

IMPORTANT Unlike previous versions of BBEdit, which specified groups of web browsers based on their creator signatures, for example, "MSIE" to include all versions of Internet Explorer, the browser list now includes all individual browser applications available. For example, if you have both Netscape 4.7.5 and 6.2.1 on your hard disk, both applications will be listed in the preferences and available for previewing.

You can use the Add, Remove, and Change buttons respectively to add or delete a browser from the list or update an entry by choosing a different version of the application. (The Remove button does not delete a browser from your hard disk, but only removes its entry from the preview list.)

new in 7.0 The Find All button finds all available Web browsers that BBEdit recognizes and adds them to the list if they are not already there. If using this button does not add a browser which you know is available, you can add it directly with the Add button. (Sometimes, the system may not properly advise BBEdit of every browser which is present.)

HTML Tools Preferences

The HTML Tools preferences set options for the HTML Tools.

HTML Updater

Mark the Preserve File Dates checkbox to have modification dates remain unchanged when updating HTML files using the Update Tool.

Syntax Checker Warnings

You can have the HTML Syntax Checker warn you when an HTML element is implicitly closed. Examples of these sorts of tags are <P> and <LI>. The closing tags for these elements are optional in some HTML specifications. If this checkbox is marked, BBEdit will warn you if it detects that you omitted the closing tag.

Link Checker Warnings

Choose the type of warnings to be issued by the HTML link checker.

Remote Links flags each offsite link so that it can be checked for validity manually.

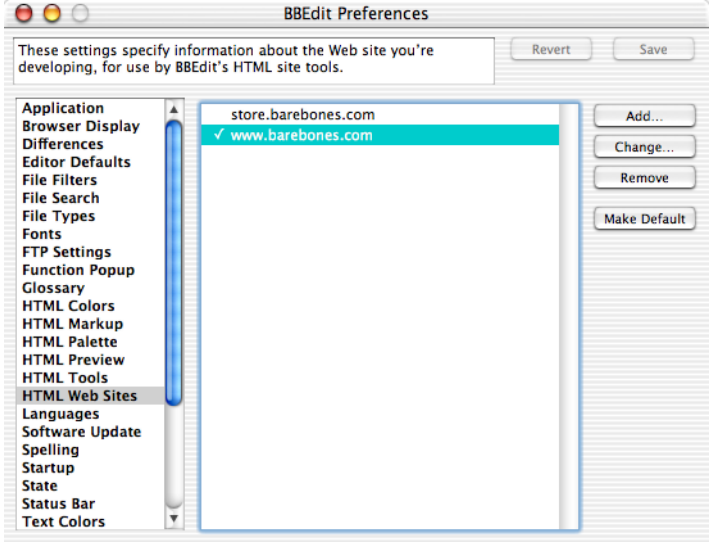
Incorrect Pathname Case flags situations where the name of a file as specified in an HTML document does not exactly match the name of the file on disk, which can cause problems when files are uploaded to servers with a case-sensitive file system.

Folder Aliases in URL Path warns you if any file paths contain aliases rather than real folders.

File Out of Server Scope controls whether the link checker will issue out of server scope warnings for links that fall outside of the server scope for the document being checked. In general you will want to leave this option on and make sure your web site preferences are properly configured. If, however, you often check transient content (such as help files or readme files) which does not merit adding a separate site configuration, you may want to turn this warning off.

HTML Web Sites Preferences

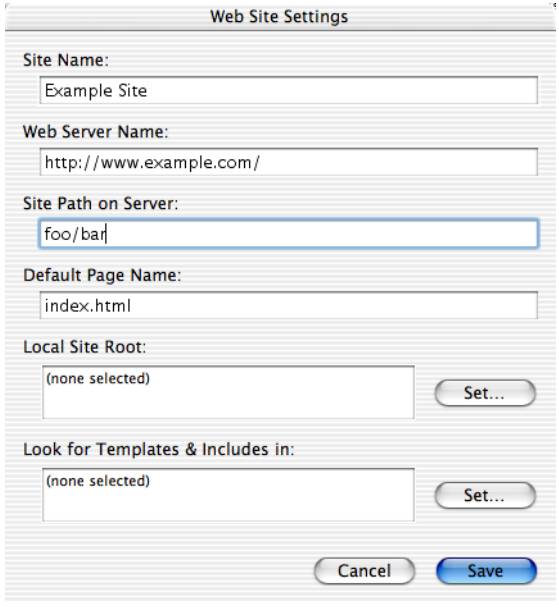
The HTML Web Sites preferences let you tell BBEdit about the Web server where your pages will be hosted.



new in 7.0 You can now define as many separate web sites as you like. The Add button brings up a Web Site Settings dialog (see below) for adding a new site to the list and specifying its properties. When a site is selected in the list, the Change button displays this same Web Site Settings dialog, allowing you to modify the existing settings for that site; the Remove button deletes the selected site from the list. The list must always include at least one site; the Remove button is disabled when only one site is listed, preventing you from deleting that last site. The check mark identifies one site in the list as the default site; you can change this setting by selecting another site and clicking the Make Default button.

All of the HTML Tools commands that generate or operate on links, such as Tag Maker and Check Links, will recognize and take account of the presence of multiple sites in the HTML Web Sites preference panel; see the descriptions of these tools in Chapter 11 for further details.

The Web Site Settings dialog displayed by the Add and Change buttons is shown below.



Site Name

Use this text field to enter the name by which the web site will be listed in the HTML Web Sites preference panel. BBEdit also uses this name in the Web Site pop-up menu of the New HTML Document dialog (see "Creating a New Document" in Chapter 11).

Web Server Name

Enter the URL of your web server here, such as "http://www.example.com/" in the figure. BBEdit uses this information to determine which links are on (local to) your server.

Site Path on Server

Enter the server path of your site's main page here. For example, if your web site is at "http://www.example.com/foo/bar/", you would enter "http://www.example.com/" for the Web Server Name (as noted above) and "foo/bar/" for the Site Path on Server.

Default Page Name

Specify the default name used by your server for the document that is sent to a web browser when a browser accesses a directory without specifying a file name. Most servers use “index.html”, “default.html”, “main.html”, or “home.html”.

Local Site Root

Use the Set button to select the folder that is the root of your web site on your local hard disk (or on a mounted server volume). You can also drag the folder’s icon onto the box to the left of the Set button.

Look for Templates and Include Files In

Use the Set button to select the folder that contains your HTML document templates and include files. You can also drag the folder’s icon onto the box to the left of the Set button.

Languages Preferences

The Languages preferences control how BBEdit associates filename extensions or suffixes (for example, .html) with the source language a file contains.

To add a new suffix mapping:

1. **Click Add.**

   The Add Suffix dialog appears.

2. **Enter the suffix, choose the language from the pop-up menu, and click a radio button to tell BBEdit whether this type of file is a source file, an include file, or neither.**

3. **Click Add to save the new mapping.**

Note You can use wildcards in the suffix to indicate single characters (?), any number of characters (*), or a single digit (#). For example, “page.#html” could map to a different language from “.html”.

To change a suffix mapping:

1. **Select an item from the list.**

2. **Click Change.**

   The Change Suffix dialog appears.

3. **Fill in the Change Suffix dialog with the appropriate suffix, choose a language from the pop-up menu, and select a radio button to indicate whether this type of file is a source file, an include file, or neither.**

To delete a suffix mapping:

1. **Select an item from the list.**

2. **Click Remove.**

To reset all suffix mappings to default settings:

1 **Click Reset All.**

Language for Untitled Windows

Choose a language from the pop-up menu to have BBEdit treat all new (unsaved) text windows as the indicated language. This allows you to see syntax coloring and use the Function pop-up menu in the window's status bar before you name and save the file.

Default Language

The language selected with this pop-up menu tells BBEdit what language to assume for files that do not have any of the listed suffixes, so that syntax coloring and the Function pop-up menu will be available for those files. This setting replaces both the <default> and <no suffix> entries presented by the suffix mapping list in previous versions.

Software Update Preferences

The Software Update preferences control the integrated version-checking capability built into BBEdit.

The Check Automatically checkbox controls whether BBEdit automatically looks to see if there is a new version available from Bare Bones Software. Regardless of the setting of the checkbox, you can always check manually by clicking the Check Now button.

The version checking mechanism used by BBEdit protects your privacy. It works by requesting information about the currently available version from Bare Bones Software's web server. The server will log the date, time and originating address of the request, and which versions of the OS and BBEdit you are using. This information is used to guide the future development of BBEdit; it is not personalized and will not be disclosed.

Spelling Preferences

The Spelling preferences control whether BBEdit uses its built-in spelling checker or an external one. You can also tell the built-in spelling checker which dictionaries to use.

Built-In

This option specifies that BBEdit should use the built-in spelling checker when you choose the Check Spelling command from the Text menu.

Use Dictionaries

BBEdit can use more than one dictionary to perform spelling checks. Click Enable to add the selected dictionary to the set of active dictionaries, or click Disable to deactivate the selected dictionary.

Note You cannot enable or disable the User Dictionary using this list; it will always be active as long as the appropriate file is present in the BBEdit Preferences folder. If there is no User Dictionary file, a new empty file will be created the first time you perform a spelling check.

Word Services

When this option is selected, BBEdit uses an external spelling checker when you choose the Check Spelling command from the Text menu. The external spelling checker must support Apple's Word Services Suite.

To set the external spelling checker, click the Set button and select the application's icon. You can also drag the spelling checker icon to the path box to the left of the Set button.

Startup Preferences

The Startup preferences control what BBEdit does when you launch it, or when the application icon is double-clicked and there are no open windows in BBEdit (even if the application is already running).

Do Nothing

This option specifies that BBEdit should not open any windows or perform any other actions.

New Text Document

This option specifies that BBEdit should open a new, empty text editing window.

New Disk Browser

This option specifies that BBEdit should open a disk browser starting at the desktop.

New FTP Browser

This option specifies that BBEdit should open an FTP browser.

Open

This option specifies that BBEdit should bring up the standard Open dialog, allowing you to select and open a file.

Open from FTP Server

This option specifies that BBEdit should bring up the Open from FTP Server dialog, allowing you to connect to an FTP server and open a file.

You can hold down the following modifiers during launch to override these actions.

Modifier(s)	Function
Option	Suppress startup items only

Modifier(s)	Function
Shift	Disable all plug-ins, tools, external services, and startup items

State Preferences

The State preferences control how BBEdit reads and writes state information in text files.

Honor Saved State

When this option is selected, BBEdit honors state information that may be stored in a file. The following suboptions let you fine-tune which state information BBEdit honors.

Window Position

When this option is selected, BBEdit restores the window of the document to the same position as when the file was closed. Otherwise BBEdit opens the window in its default position.

Font Settings

When this option is selected, BBEdit restores the font information stored with a document. Otherwise it uses the default font settings.

Selection Range

When this option is selected, BBEdit restores the insertion point or selection range to the same position as when the file was closed. Otherwise the insertion point is at the beginning of the file.

Scrollbar Position

When this option is selected, BBEdit restores the scroll bar position to the same position as when the file was closed. Otherwise BBEdit opens the file with the top of the file showing.

Option Settings

When selected, BBEdit reads document-specific options, such as soft wrap, show invisibles, and line numbering, from the saved state information.

Printing Settings

When this option is selected, BBEdit restores the printing information stored with a document. Otherwise it uses the default printing settings.

Default State for New Documents

The Default State for New Documents setting lets you choose the kind of state information that BBEdit adds when you create and save a file. You can choose to save no state information, MPW state information, or BBEdit state information. See the section “Saving State Information” in Chapter 3 for more details on the different types of states.

Always Add State

When this option is selected, BBEdit always adds state information when you save a file. Otherwise BBEdit saves state information only for files that already have state information.

Status Bar Preferences

The Status Bar preferences let you choose which icons and pop-up menus appear in the status bar of BBEdit document windows.

Show Status Bar

Mark this checkbox to display the status bar by default. (You can always show it or hide it independently for each window.)

Show Philip Bar

This option displays the Philip Bar, which represents the usable width of the screen on a 9-inch ("classic") Macintosh monitor, in the status bar.

Show Tab Stops

This option displays tab stops in the status bar, using the tab width set in the Font & Tabs dialog.

Show Line Numbers

This option displays line numbers along the left edge of the window.

Show Cursor Position

This option adds a panel at the bottom-left corner of the window that displays the location (line and column) of the insertion point, or the endpoint of a just-changed selection range (if the cursor has not been moved yet after the change).

Show Current Function

This option displays the name of the function the insertion point is in (if any) at the bottom-left corner of the window.

Function Popup

This option displays the Function pop-up menu, which lists the functions (for source code files) or named anchors (for HTML files) in the document, allowing you to jump directly to any function or anchor.

Text Options

This option displays the Text Options pop-up menu, which allows you to set wrapping, display, and editing preferences for the current window, as with the Text Options command in the Edit menu.

Markers

This option displays the Mark pop-up menu, which lets you define and locate named markers in a document.

File Options

This option displays the File pop-up menu, which lets you set end-of-line and other compatibility options.

Insert Menu

This option displays the Insert pop-up menu, which lets you insert the contents of another text file (or a toolbox call template) into the current document.

File Path

This option displays the Path pop-up menu, which shows the location of the file being edited within the folder hierarchy. You can choose any folder from this menu to open it in the Finder.

Get Info Icon

This option displays the Info button, which opens an Info window showing the file's path, along with character, word, line, and page counts for the file and the selection.

Super Get Info Icon

This option displays the Super Get Info button, which asks Super Get Info to display file information pertaining to the current document. This option is available only if you are running on Mac OS X and have Super Get Info installed on your system.

Document Icon

This option displays the Document Icon button, which serves as a proxy for the document file. You can click the icon to reveal the current file in the Finder, or drag it anywhere the original file can be dragged.

Show All/Hide All

This option shows or hides all of the icons in the status bar.

Button Puffiness

On Mac OS 9, you can use this option to choose the degree of the 3D effect used on the status bar buttons, from minimal to excessive. In Mac OS X, this option is not available.

Text Colors Preferences

The Text Colors preferences let you select the colors that BBEdit uses when the syntax coloring option is on. You can also select a default window background color and a default text color, which will apply to all text windows, although we feel compelled to point out that there are good reasons why the default Macintosh text color scheme is what it is.

You can turn on syntax coloring globally by:

- setting the Syntax Coloring option in the Editor Defaults preference panel

You can turn on syntax coloring for any individual document window by:

- choosing Syntax Coloring from the Text Options pop-up menu (left)
- selecting the Syntax Coloring option in the Text Options dialog

The color bars show the colors that BBEdit uses to display different language elements. To change colors, click the color box. BBEdit will open the system Color Picker dialog box that you can use to select a new color. To restore all the colors to their default settings, click the Reset to Factory Colors button.

Note When the Color Attributes Separately checkbox is selected (as is the default), BBEdit lets you specify different colors for HTML attribute names, attribute values, and processing instructions, in addition to anchor, image, and other tags. When it is turned off, HTML attributes are colored the same as the tag (as in previous versions of BBEdit).

Text Editing Preferences

The Text Editing preferences control some of BBEdit's optional text editing features. Many of these preferences were located in the Editor Defaults preference panel in previous versions of BBEdit.

Enable Shift-Delete for Forward Delete

When this option is selected, holding down the Shift key with the Delete key makes the Delete key work the same way as the Forward Delete key on extended keyboards. This feature is particularly useful on PowerBooks.

Use Numeric Keypad for Cursor Movement

To use the numeric keypad to move the insertion point, select this option.

start of line **7**	up **8**	scroll up **9**
left **4**	show selection **5**	right **6**

end of line 1	down 2	scroll down 3

You can use the Shift key with the keys on the numeric keypad to extend a selection. You can use the Command and Option keys with the 2, 4, 6, and 8 keys as you would the arrow keys.

To toggle the behavior of the keypad between moving the cursor and entering numbers, hold down the Option key and press the Clear key in the upper-left corner of the keypad. (This key is also labeled Num Lock on some keyboards.)

Allow Single-Click Line Selection

If the checkbox is turned on, clicking in the left margin of an editing window selects an entire line. (If you have line numbers displayed, via the Show Line Numbers option in the Status Bar preference panel, you can click in the line number as well.) The pointer changes to a right arrow when it is in the left margin. Click and drag to select multiple lines. Double-click to select an entire paragraph; double-click and drag to select a range of paragraphs.

If this option is off, clicking in the left margin moves the insertion point to the beginning of the clicked line (as in previous versions of BBEdit).

Double-Click to Balance

When this preference is turned on, you can double-click any opening or closing parenthesis, brace, or bracket— ( ) { } [ ] —to select the entire range of text enclosed by a balanced pair.

Confirm Non-Undoable Editing Actions

To have BBEdit stop warning you when you are about to perform an action that cannot be undone, turn this checkbox off.

Use "Hard" Line Numbering in Soft-Wrapped Views

If this switch is turned on, the line number bar, cursor position display, and Go To Line commands in editing views will use line numbers that correspond to "hard" carriage returns in the document, rather than to soft-wrapped line breaks (as in previous versions of BBEdit).

Use Emacs Key Bindings

If turned on, this option allows you to use the basic Emacs navigation keystrokes to move around in editing views. It is not a full Emacs emulation mode; rather, it is more of a comfort blanket for individuals with Emacs key bindings hard-wired into their muscle memory. See Appendix B, "Editing Shortcuts," for a list of the Emacs commands BBEdit supports.

If you turn on the Display Status Window option, a small floating window will appear when you type an Emacs shortcut, indicating which command you have applied.

Exchange Command and Option Key Behavior

These two checkboxes let you swap the meaning of the Option and Command keys when used with cursor navigation keys to move through a window's contents. You can set this separately for horizontal and vertical cursor movement. For details on using cursor navigation keys, see Chapter 4 and Appendix B.

Extra Space in Text Views

To have BBEdit leave extra empty space when you scroll to the end of a text view, choose Half Window or Full Window here.

Allow Text Smoothing

This option is available only on Mac OS X. If turned on, it allows the system to draw smoothed (anti-aliased) text in text-editing views; otherwise, text smoothing is suppressed, which may make certain fonts and sizes more readable.

Prior to OS X 10.1.5, the text smoothing is done by QuickDraw; in 10.1.5 or later, it is done by Quartz. Note that Quartz text smoothing may have no visible effect on some specific fonts and sizes (for example, Monaco 9).

Note During initial configuration, if you are running on Mac OS X and Quartz Extreme is not supported on all displays, the "Allow Text Smoothing" preference will be turned off. You can turn it back on again if you are willing to pay the price of slower performance on non-accelerated displays or Mac OS X 10.1.x.

Enable Unicode Input

In general, you should leave this option on, or else you will not be able to use the Mac OS X character palette, nor will you be able to use Unicode keyboard layouts. However, some input methods (most notably, Japanese) may generate the wrong character unless you turn off this option.

Text Encodings Preferences

new in 7.0.2 When opening documents, BBEdit can now automatically recognize and appropriately handle files that use character set encodings other than Mac Roman, even multi-byte character sets.

The Text Encodings preferences let you choose which character set encodings appear in the pop-up menus that list encodings. These pop-up menus are:

- The Read As pop-up menu in the Open dialog
- The Encoding pop-up menu in the Options dialog within the Save dialog
- The Encoding submenu of the status bar's File Options pop-up menu

- The character set pop-up menus in various HTML tools dialogs (including the New HTML Document dialog)
- The encoding pop-up menu in the Text Files: Opening and Text Files: Saving preferences panels

To include an encoding in those menus, select it and click Enable. To remove it from those menus, select it and click Disable. To add all the encodings or remove all the encodings from the menus, use the Enable All and Disable All buttons. To restore the contents of those menus to the factory defaults, use the Restore Defaults button.

The Mac Roman and Unicode encodings present at the top of the list are always enabled and cannot be turned off.

Tip To keep the length of the encoding menus manageable, you should add only those encodings which you use frequently.)

Text Files: Opening Preferences

The Text Files: Opening preferences control BBEdit's behavior when it opens files.

Translate Line Breaks

When this option is selected, BBEdit translates DOS or Unix line breaks when opening a file. Otherwise BBEdit leaves the original line breaks untranslated.

If a File's Type Is Unknown

These settings tell BBEdit how to deal with files whose type and creator codes are not set. Usually, such files are created by Unix programs running on Mac OS X, but they may also be downloaded from remote servers. You can choose:

- Ignore It: BBEdit will behave consistently with previous versions. Since the file's type is not 'TEXT' (or any other type which is recognizable as a text-file type), BBEdit will ignore the file in situations where a text file is required.
- Assume It's Text: BBEdit will assume that the file should be treated as text. This will give maximum exposure to such files, at the expense of occasionally seeing a file that does not actually contain text (like binary data or executable files on Mac OS X).
- Map the File Name: BBEdit will inspect the file's name to see if it can figure out whether the file is text or not. BBEdit will first attempt to map the file name to the list of suffix-to-language mappings specified in the Languages preference panel. If a file name matches up with a language (even if the language is "None"), the file is assumed to be a text file. Thus, you can use BBEdit's own suffix mappings to convince it to recognize as text any files whose suffixes are not in Mac OS X's built-in list of file-suffix-to-file-type mappings. If no match is found in the Languages preferences, BBEdit will next apply the Internet Config file name mappings. (On Mac OS 9, you can configure these mappings with the Internet control panel. On Mac OS X, a set of default mappings is present, but there is no direct interface for configuring them; however, you can use Internet Explorer's File Helper preferences for this purpose.)

new in 7.0.2 This setting is now treated separately for Mac OS X and Mac OS 9. On Mac OS 9, the factory default remains "Assume it's Text". However, on Mac OS X, the factory default setting is now "Map the File Name", which should provide for more desirable default behavior when performing operations such as multi-file searches with the "Text Files Only" option selected.

Regardless of the OS you are running BBEdit on, you should select whichever setting makes the most sense for the sorts of files you work with: if the files are downloaded from remote hosts and often do not have correct file types, but you *know* that they are always text, you can select "Assume It's Text".

Link File's Encoding to HTML/XHTML Character Set

new in 7.0.3 When this option is selected, BBEdit will use the character set specified in the appropriate HTML meta tag or XML declaration to determine a file's encoding when opening the file. Also, when this option is on, changing an HTML or XML document's character set with the Character Set markup command will adjust the file's encoding to match (as indicated on the Encoding submenu of the File Options popup in the status bar), and changing the file's encoding will adjust the character set declaration (if one exists). This option is on by default.

When this option is off, then BBEdit does not attempt to use the character set specified in the HTML meta tag or XML declaration, but will follow the usual procedure for determining the file's character set. (See "Choosing the Encoding for a Document" on page 27..) The only reason you might want to turn this option off is if you routinely put characters into your document that cannot be represented in the declared character set, e.g. if you will be post-processing the file by some other means which modifies these characters.

If the File's Encoding Can't Be Guessed, use

new in 7.0.2 When opening documents, BBEdit can now automatically recognize and appropriately handle files that use character set encodings other than Mac Roman, even multi-byte character sets.

This menu determines which character set encoding to use when BBEdit cannot determine the proper encoding by examining the file. This also establishes the default setting of the "Read As:" pop-up menu in the Open dialog.

Warn of Malformed UTF-8 Files

When this option is selected, BBEdit warns you if you open a UTF-8 file that contains an invalid UTF-8 character sequence.

Note Previous versions of BBEdit contained a "Soft Wrap SimpleText Documents" preference setting; it has been removed. Now, SimpleText documents are always soft-wrapped when opened (unless they contain saved BBEdit state that says otherwise).

Text Files: Saving Preferences

The Text Files: Saving preferences control BBEdit's behavior when it saves files, including file backup settings.

Force New Line at End

When this option is selected, BBEdit will always add a line break at the end of the file if it does not already end with one.

Default Line Breaks

These options let you choose what kinds of line breaks BBEdit writes when you save the file. You can choose:

- Macintosh line breaks (ASCII 13) if you are using the file only on a Macintosh.
- Unix line breaks (ASCII 10) if the file resides on a Unix file server or if you are sending it to someone who uses Unix.
- DOS line breaks (ASCII 13/10) if the file resides on a DOS file server or if you are sending it to someone who uses a DOS system

Additionally, if the Use Unicode Line Breaks option is selected, BBEdit will use Unicode line breaks by default for newly created (or converted) Unicode documents, instead of the chosen platform-specific line breaks.

new in 7.0 Since many programs on Mac OS X use Unix line break conventions, BBEdit now maintains separate settings for the two platforms. The factory default settings are "Macintosh" for OS 9 and "Unix" for OS X.

Make Backups Before Saving

Select this checkbox to tell BBEdit to make automatic backup copies of every file as you save it. This preference setting establishes the defaults for newly created documents, and for documents in which there are no saved backup settings.

If you prefer that BBEdit create backup files in the same folders that your documents are already saved in, choose the option for Use Document's Folder. This is the default setting. If you prefer to save backups in a different folder, choose the Use Folder setting instead. You can click the Choose button to select the desired backup folder using a dialog, or just drag the folder to the box.

Even if you do not set BBEdit to perform general backups here, you can still set backup options for individual files by using the Backup Options command in the File menu.

Text Printing Preferences

The Text Printing preferences control how BBEdit prints your documents.

Default for Page Setup

The Page Setup button lets you set the default options for the Page Setup dialog box.

Defaults for Printing

The Printing button lets you set the default options for the Print dialog box.

Default Font

To set the default printing font, click the Default Font button. BBEdit opens a dialog that lets you specify the font and the width of tab stops. The current printing font settings appear in the display box to the right of the button.

Use Document's Font

When this option is selected, BBEdit uses the document's font when printing.

Fractional Widths

When this option is selected, BBEdit prints proportionally-spaced fonts with better letter spacing.

Print Backwards

When this option is selected, BBEdit prints documents last page first. This option is useful if you are printing to a printer like the original LaserWriter that does not arrange pages in the proper order.

Frame Printing Area

When this option is selected, BBEdit draws a box along the edges of the printed text.

Print Page Headers

When this option is selected, BBEdit prints the page number, the name of the file, the time and date printed in a header at the top of each page.

Print Full Pathname

When this option is selected, BBEdit prints the full pathname of the file being printed in the header.

Print Line Numbers

When this option is selected, BBEdit prints line numbers along the left edge of the paper.

Print Two-Up

When this option is selected, BBEdit prints two pages on one sheet of paper. Use this option to save paper.

1-Inch Gutter

When this option is selected, BBEdit leaves a one-inch margin along the left edge of the paper. Use this option if you usually put your pages in three-ring binders.

Print Color Syntax

If this checkbox is marked, BBEdit prints colorized text in color. You should generally use this option only on color printers, as colorized text may come out in difficult-to-read dithered shades of gray on black-and-white printers.

Time Stamp

The Time Stamp options let you choose whether the date that appears in the header is the date that the file was last modified or the date that the file was printed.

Text Search Preferences

The Text Search preferences let you set default options to use with the Find command.

Note In BBEdit 6.0, the Text Search preference panel contained checkboxes for Wrap Around, Use Grep, Case Sensitive, and Entire Words. These preferences were used only to establish the defaults for parameters not supplied by AppleScript find and replace operations, but their presence caused confusion. In all later versions, the value for any of these parameters not explicitly supplied in script commands is "false," and these settings have been removed from the panel.

Report Single-File "Replace All" Results

When this option is selected, BBEdit displays a dialog telling you how many replacements it made when you perform a Replace All operation on a single file.

Remember Find Dialog's "Start At Top" Setting

Mark this checkbox to have BBEdit remember the state of the Start At Top checkbox in the Find & Replace dialog from one invocation to the next.

Color Grep Patterns in Find Dialog

When this preference is turned on, and Use Grep is turned on in the Find & Replace dialog, BBEdit will apply syntax coloring to grep search and replace patterns.

Multi-File Search/Replace

Mark Allow File Script Guessing to have BBEdit guess for the script used in documents that do not contain information about their encoding. This is useful when searching documents in various languages. If this checkbox is marked, BBEdit uses the script of the search string when searching a file whose script could not be determined; otherwise, it uses MacRoman.

Grep Patterns

This list displays all the grep patterns (regular expressions) you have defined for use in the Find & Replace dialog's Patterns pop-up menu. Click Add to add a new one, click Change to edit the selected pattern, or click Remove to delete the selected pattern.

Note If you have the Preferences window open, you will not be able to add grep patterns from the Find & Replace dialog. To work around this, close the Preferences window before using the Find & Replace dialog to add new grep patterns.

Tools Preferences

The Tools preferences control the way BBEdit integrates with programming tools, such as AppleScript editors, development environments and Toolbox references.

Script Editor

To set the script editor for use with the Open Script Editor command in the Script menu, do one of the following:

- Click the Set button and select the script editor from the dialog box.
- Drag the icon of the script editor to the path box.

Note The script editor setting is stored separately for Mac OS X and for Mac OS 9. This makes it easier to share one set of preferences on both operating systems without having to reset the script editor when switch-booting.

Coding Tools

These options let you select which development environments you plan to use with BBEdit. They include BBEdit's built-in HTML tools and a variety of programming packages, including Project Builder, Metrowerks CodeWarrior and Absoft Fortran, as well as the Dreamweaver visual HTML editor from Macromedia. On Mac OS 9, BBEdit can integrate with MacPerl; on Mac OS X, it can integrate with any Unix scripting tool, such as Perl, Python, Ruby, or shells. MPW's SourceServer (Projector) is also supported, as is CVS (Concurrent Versions System) on Mac OS X. Turning off the tools you do not plan to use will allow BBEdit to start up faster.

In order to use BBEdit as an external editor for Project Builder, you must have version 2.1 or later of Project Builder installed; earlier versions of Project Builder do not incorporate external editor support. (The December 2002 Developer Tools CD-ROM contains this version.)

IMPORTANT In order for CVS commands to be operative, you will need to have configured your CVS setup and repository access from the command line. The details of how to do this vary from one system to another; consult your local CVS expert for specifics.

Note BBEdit no longer supports Kodex, MPW ToolServer, MPW 411, or the THINK C, THINK Pascal, and Symantec C++ environments.

Mac OS API Reference

To select a viewer application for displaying reference information on the Mac OS application programming interface, do one of the following:

- Click the Set button next to the Mac OS API Reference path box and select the desired viewer application in the resulting dialog.
- Drag the icon of the viewer application directly into the path box.

If the Use Mac OS X Developer Help checkbox is selected and you are running on Mac OS X, BBEdit will always hand off API lookups to the Mac OS X Developer Help Center, in preference to the viewer application specified in the path box. If you spend time working in both Mac OS 9 and Mac OS X, this allows you to use the Developer Help Center for your API references in OS X while still retaining your preferred viewer application setting on the Mac OS 9 side, without having to change preference settings each time you switch from one platform to the other.

Note The Mac OS X Developer Help option is available only on Mac OS X. With this option turned on, you can use Find in Reference to search the Carbon API help book.

Default Shell

The Default Shell pop-up menu (available only on Mac OS X) lists all Unix shells currently known and available on your system, allowing you to choose one as your preferred shell for use with shell worksheets. (Shell worksheets are discussed in detail in Chapter 14.)

Install "bbedit" Tool

new in 7.0 The "Install 'bbedit' Tool" button (available only on Mac OS X) installs the current version of the "bbedit" tool for invoking BBEdit from the Unix command line. The first time you run BBEdit after installation, it offers to install the "bbedit" tool for you. If you choose not to do so, you can use this button in the Tools preference panel to install the tool at a later time. If the tool is already installed, the button will update it to a newer version if one is available; it will not overwrite an existing version of the tool with an older version. See Chapter 14 for further details on the "bbedit" command-line tool.

Unix Scripting Preferences

This preferences panel contains a switch to control whether BBEdit sends Perl and Unix scripts to the interpreter as UTF-8 (the default behavior as of BBEdit 7.0) or as Mac Roman (the default behavior for pre-7.0 versions).

Windows Preferences

The Windows preferences control the size and appearance of both newly created windows and windows that do not contain their own display state information. (See the State panel to tell BBEdit how to store state information in files.)

Window Zooming

Always Zoom Windows

Mark this checkbox to always expand windows to their maximum size when opening them, regardless of their saved window size state.

Move As Little As Possible

When this option is selected, BBEdit keeps windows as close to their original location as possible when you zoom them.

Maximum Width

This pop-up menu lets you specify the maximum width of a zoomed window. The default setting is 13-inch Display.

Zoom Windows To

On systems with multiple monitors, this pop-up menu lets you choose which screen BBEdit should use when zooming. You can choose the main screen (the one containing the menu bar), the nearest screen (the one containing most of the active window), the largest screen, or the smallest screen.

Window Menu

Show Full Paths

Mark this checkbox to show the complete pathname of open documents, rather than just their names, in BBEdit's Window menu. If two or more files have identical filenames, their complete pathnames will always be shown to prevent ambiguity, regardless of this setting.

Group by Window Kind

Mark this checkbox to group windows of the same kind together in the Window menu. For example, text editing windows, disk browsers, and search results browsers are all different kinds of windows. Within each group, windows will be sorted as determined by the Sort Windows By radio buttons (see below).

Sort Windows By

Select Name to list windows alphabetically by name, or Creation Order to list them in the order they were opened in the current BBEdit session.

Window Stacking

These icons determine how BBEdit stacks windows: down and to the left, straight down, directly atop, or down and to the right. BBEdit stacks windows down and to the left by default.

new in 7.0

Leave Room for Palettes

When this option is on, BBEdit leaves room for any open floating palettes when creating or rearranging windows, if the palettes are stacked together such that at least one is against either the right-hand or left-hand edge of the screen. This option is on by default.

Leave Room for Finder

When these options are selected, BBEdit leaves room at the right side and/or the bottom of the screen so that you can see icons on the desktop. These options are off by default.

CHAPTER

11 BBEdit HTML Tools

This chapter describes the use of BBEdit's HTML Tools, a powerful suite of utilities for creating and maintaining HTML documents and entire web sites.

In this chapter

Introduction to the HTML Tools **185**
Recommended Books – 186 • *Recommended Online Resources* – 186
SGML Resources – 187 • *What You Need* – 187
Configuring the HTML Tools **187**
Using the HTML Tools **188**
Creating a New Document – 189 • *File Addressing* – 191
HTML Tool Descriptions. **192**
Tag Maker – 193 • *Edit Tag* – 194 • *Close Current Tag* – 195
Balance Tags – 195 • *Document Type* – 195 • *Character Set* – 195
CSS Submenu – 196 • *Body Properties* – 200 • *Head Elements* – 200
Block Elements – 201 • *Lists* – 203 • *Tables* – 203 • *Forms* – 204
Inline Elements – 206 • *Phrase Elements* – 209
Font Style Elements – 210 • *Frames* – 211 • *Check* – 211 • *Update* – 212
Includes – 214 • *Utilities* – 214 • *Misc* – 215 • *Preview* – 216
The HTML Tools Palette **216**
HTML Tools Palette Tips – 217 • *HTML Tools Palette* – 217
Other Palettes – 218
HTML Translation **220**
Remove Tags – 220 • *Paragraphs* – 220 • *HTML Entities* – 220
Templates **220**
Template Setup – 220 • *Using a Template* – 221
Custom Markup **221**

Introduction to the HTML Tools

IMPORTANT Please be sure to read both this introduction and the next section, "Configuring the HTML Tools," before attempting to create Web pages using these tools.

Already the most powerful set of utilities ever created for the World Wide Web developer, the BBEdit HTML Tools are more powerful than ever. The HTML tools streamline the process of creating HTML documents, help you check for common usage errors, and speed up development time, without sacrificing flexibility or forcing you to work within the limits of visual editing tools.

Among the improvements made over time to the HTML Tools are that all of the tools support entry and editing of double-byte text, and they will also automatically recognize and insert tags in the correct format when used in XHTML documents.

Note Anyone preparing HTML files in UTF-8 format may want to save them without the byte-order mark, due to a bug in Microsoft Internet Explorer for the Macintosh. This issue may be addressed in a future version of Internet Explorer.

The BBEdit HTML Tools and their documentation are written with the assumption that you already understand HTML. If you do not, we suggest one or more of the references listed below. None are published by or otherwise affiliated with Bare Bones Software, Inc., but other BBEdit users have found them useful for HTML usage and design issues.

Recommended Books

Learning Web Design, Jennifer Niederst. O'Reilly and Associates, 2001. ISBN: 0-59600-036-7

HTML for the World Wide Web with XHTML and CSS: Visual QuickStart Guide — 5th Edition, Elizabeth Castro. Peachpit Press, 2002. ISBN: 0-32113-007-3

Teach Yourself Web Publishing with HTML and XHTML in 21 Days — 3rd Edition, Laura Lemay, Denise Tyler, Rafe Colburn. Sams, 2001. ISBN: 0-67232-077-0

Cascading Style Sheets: The Definitive Guide, Eric A. Meyer. O'Reilly and Associates, 2000. ISBN: 1-56592-622-6

HTML & XHTML: The Definitive Guide — 4th Edition, Chuck Musciano, Bill Kennedy. O'Reilly and Associates, 2000. ISBN: 0-59600-026-X

HTML Stylesheet Sourcebook, Ian Graham. Wiley and Sons, 1997. ISBN 0-47119-664-9

Recommended Online Resources

HTML Help by The Web Design Group
`http://www.htmlhelp.com/`

Apple Internet Developer info
`http://developer.apple.com/internet/`

The Yale C/AIM WWW Style Manual
`http://info.med.yale.edu/caim/manual/contents.html`

The Bare Bones Guide to HTML by Kevin Werbach (no relation to Bare Bones Software)
`http://werbach.com/barebones/`

The W3 Consortium site
`http://www.w3.org/`

evolt.org — Browser Archive
`http://browsers.evolt.org/`

WebReference.com by Mecklermedia
`http://www.webreference.com/`

WebMonkey by Wired Digital
`http://www.webmonkey.com/`

DevEdge by Netscape
`http://developer.netscape.com/`

SGML Resources

HTML is an application of SGML and shares many concepts and characteristics with it. You do not need to know SGML to create Web pages, but you may find that studying it improves your understanding of some HTML issues.

What is SGML and why should I use it? by the SGML Project
`http://www.oasis-open.org/cover/exetwhat.html`

SGML on the Web by Softquad Inc.
`http://www.ncsa.uiuc.edu/SDG/Software/Mosaic/WebSGML.html`

What You Need

Before you start, make sure you have the following available:

- A modern Web browser for previewing your pages. We suggest having at least one version each of Microsoft Internet Explorer, Netscape Navigator or Communicator, Mozilla, and OmniWeb available. These are the most widely used browsers but they often do not display pages the same way.
- A general-purpose FTP client such as Fetch or Interarchy. While BBEdit does have built-in FTP tools, such dedicated applications are, naturally, more powerful, and of course also allow you to upload things other than text files. You will find them useful in creating and managing your web site.
- Access to a Web server, either your own or someone else's, where you will publish your pages on the Web. (Your Internet provider is a good place to start and can help you find the answers to questions about obtaining your own domain name, setting up your own dedicated server, and so on.)

You will also want to be familiar with BBEdit's basic capabilities. The other chapters in this manual will help you learn more about editing and searching text using BBEdit.

Configuring the HTML Tools

Before using the HTML Tools, you should prepare your source documents and your copy of BBEdit. Although you can change your settings at any time, we suggest visiting the Preferences window before starting.

First, create a folder to contain working (draft) copies of your HTML documents. Put the HTML documents you are working on in this folder (either copying them from your web site or moving them from elsewhere on your hard drive); then upload them to your Web server when you are satisfied with them.

Next, launch BBEdit and open the Preferences window (by choosing Preferences from the BBEdit menu on Mac OS X or from the Edit menu on earlier Mac OS versions). For now we will only set the preferences for working with HTML. Refer to the following sections of this manual for further details:

- "HTML Colors Preferences" on page 162 to choose a layout for the Web Safe Colors palette
- "HTML Markup Preferences" on page 163 to choose options for formatting HTML tags and attributes

- "HTML Palette Preferences" on page 164 to select the appearance of the HTML Tools palette
- "HTML Tools Preferences" on page 165 to tweak the function of the HTML Tools
- "HTML Web Sites Preferences" on page 166 to tell BBEdit where your web site is (locally and on your server)

Using the HTML Tools

There are two ways to use BBEdit's HTML Tools: via the HTML Tools floating palette (right) and through the Markup pull-down menu. These two methods are functionally equivalent in most respects.

Most beginning users find it easiest to use the HTML Tools through the palette. There are three basic types of buttons on the HTML Tools palette:

- Those you simply click to perform an action or bring up a settings dialog before performing an action—for example, New Document
- Those that provide pop-up menus containing related options—for example, Heading, Frames, and Utilities
- Those that contain both a clickable button and a pop-up list—for example, List, Table, and Preview

Buttons containing a "grip-strip" (a double vertical bar on the left side) may be used via drag and drop. For example, the Image button may be dragged into a document window to display the Image tool dialog. Subsequently, the specified <IMG> tag is placed at the point where the button was dropped.

Tip You can Command-click a pop-up menu to bypass the menu display; the tool will perform the last-used action again.

The second means of using the HTML Tools is from BBEdit's Markup menu. This allows you to make your own choice between the drag and drop convenience of palettes, and the less screen-intensive menus; either way, you will still be able to access all of the HTML Tools' capabilities.

Every HTML Tools function is available through an item on the Markup menu or one of its submenus. Key equivalents (if assigned) are displayed next to the menu item. (On Mac OS 9, you can change or assign keyboard shortcuts to menu commands by choosing Set Menu Keys from the Edit menu; on Mac OS X, the Set Menu Keys command is in the BBEdit menu.)

Many tool dialogs offer keyboard shortcuts for activating buttons. Hold the Command key down when a dialog is open to see these shortcuts.

Most of the HTML Tools commands apply to the document which you currently have in the foreground—either at the current insertion point, or on the current range, as appropriate. Some of the utility functions, however, can operate on many documents. The Tool Descriptions section provides more details on how each function works.

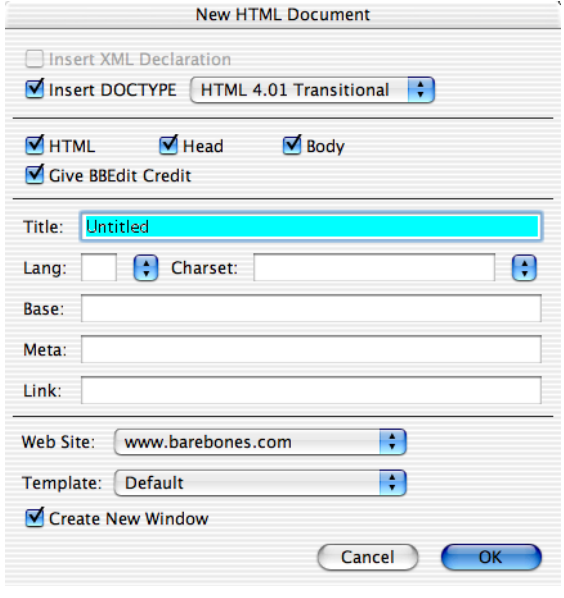
Creating a New Document

You can create an HTML document simply by taking any text file and adding HTML markup to it, but there's a better way. BBEdit includes a New Document command to create the basic skeleton of an HTML document for you.

To create a new HTML document, you can do either of the following:

- Chose New from the File menu and then choose HTML Document from the New submenu.
- Click the New Document button in the HTML Tools palette.

In either case, the following dialog appears:



Note If the frontmost window in BBEdit is editable, you can deselect the Create New Window option in the dialog. This will insert the document template around the current text contents of the window.

In many cases, you can simply specify a title for the document and click OK, ignoring the other options. However, we suggest that you fill out this dialog as completely as possible. The function of each field is described below.

Insert XML Declaration

Choose this checkbox to have BBEdit insert an XML declaration. If the DOCTYPE selected in the pop-up menu below is not an XML-based type (that is, is not an XHTML version), this checkbox will be disabled.

Note Although an XML declaration is required for XML documents whose character set is not UTF-8 or ISO 8859-1, some currently shipping Web browsers (including Internet Explorer 5.0 for Macintosh) cannot handle documents with XML declarations.

Insert DOCTYPE

Choose the type of this HTML document from the pop-up menu to have BBEdit insert an SGML prolog containing the desired document type. This information is largely ignored by browsers; however, HTML syntax checkers (such as the one built into BBEdit) use it to determine which constructs are legal according to the HTML standard you select. Available DOCTYPEs include:

- HTML 3.2
- HTML 4.01 (Transitional, Frameset, and Strict versions)
- XHTML 1.0 (Transitional, Frameset, and Strict versions)
- XHTML 1.1
- Compact HTML (CHTML) 2.0

Note Although HTML 4.0 has been superseded by HTML 4.01 and most users will want to use the latter, BBEdit's syntax checker continues to accept HTML 4.0 as well, for historical reasons.

HTML, Head, and Body

Every HTML document should contain <HTML>, <HEAD>, and <BODY> tags. Mark these checkboxes to have BBEdit insert these tags automatically.

Give BBEdit Credit

This option generates a <META NAME="generator" CONTENT="BBEdit 7.0"> tag in the document, indicating that you used BBEdit to create it.

Title

Enter the HTML title for the document (which can be different from the file name) here. This text will appear in the title bar of a browser's window when this document is opened.

Lang

This option indicates the language this document is written in. This information can be used by search engines and translation software to help Web users find pages in their own language.

Charset

This option indicates the character set used by the document. If you do not specify a character set, the character set chosen in the user's browser will be used.

Note You can choose which character sets appear in this pop-up menu by using the Text Encodings panel of the Preferences window.

Base

Enter the URL for this document's BASE tag. The BASE tag indicates the actual location of the document on a server, and all relative URLs specified in the document will be resolved by the browser relative to this location. No BASE tag is created if you leave this field blank.

Meta

Enter the META tag to be included at the top of the document here, if any. (META tags can be used for "client-pull" techniques, for indicating search keywords, and for a wide variety of other purposes.)

Link

If you want to use a LINK tag to specify a relationship between this document and other documents, an email address, style sheet, or other information about the document, enter the desired information in this field.

Note If you use a template to create the HTML document, the template must include the #META# and #LINK# placeholders to indicate the location at which this information should be inserted into the generated document.

Web Site

new in 7.0 This pop-up menu displays the web sites defined in your HTML Web Sites preference panel, allowing you to switch between them for the purpose of choosing a template to base the new document on. The initial selection on opening the dialog is the default site designated in the HTML Web Sites preferences.

Template

This pop-up menu displays the templates specified in the "Templates & Includes" folder associated with the selected web site in the HTML Web Sites preferences. (The names of template files must end with ".tmpl" to be displayed in this menu.) Selecting a template other than Default will use the specified template to create a new document, potentially ignoring some or all of the settings specified in this dialog.

File Addressing

Many of the HTML tools require you to provide the pathname or URL of a file or folder, such as to identify a base address, style sheet, or hypertext link. Typically this is done with a File button for locating the desired file via an Open dialog, together with a text field for displaying the resulting URL.

The URL can be expressed in any of three ways, selected by radio buttons below the text field:

- *Full addressing* specifies the complete URL, including the scheme ("http:"), the server's domain name, and the complete directory path leading to the file within that server.
- *Root addressing* specifies just the file's location within its host server.
- *Relative addressing* specifies the file's location relative to that of the HTML document referring to it.

For example, if the web site resides on a server named "www.example.com" in directory "foo/bar," and you are creating a document in that directory named "index.html" with a link to file "target.html" in subdirectory "flapdoodle", the full address would be

```
http://www.example.com/foo/bar/flapdoodle/target.html
```

the root address would be

```
/foo/bar/flapdoodle/target.html
```

and the relative address would be

```
flapdoodle/target.html
```

If you have designated a folder on your local disk as the site root for your web site in the HTML Web Sites preference panel, the HTML tools will recognize files within that folder and substitute the server domain and site path in its place. For instance, if your local site root for the web site above is the folder "HD/HTML Documents/Main Site", the tools will automatically convert the file path

```
HD/HTML Documents/Main Site/flapdoodle/target.html
```

to

```
http://www.example.com/foo/bar/flapdoodle/target.html
```

new in 7.0 If you have defined multiple web sites in the HTML Web Sites preference panel, the HTML tools will recognize and convert file paths lying in any of their site root folders. This will work even when the source and target files are on different sites; the tools will convert the target file's pathname to a full URL within the target web site. When the source and target files are both on the same site, all three address styles (full, root, and relative) are available; when the files are on different sites, root addressing is disabled (its radio button is dimmed). For files residing in local site root folders on the same disk, relative addressing from one file to the other is always available.

HTML Tool Descriptions

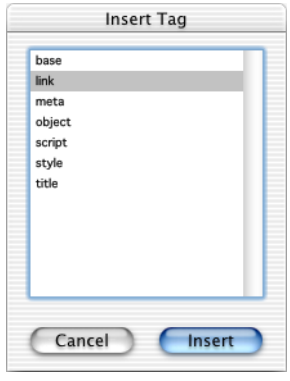
This section describes all of the HTML Tools as they appear in the hierarchical Markup menu. For a description of the tools as they appear on the palette, see the HTML Tool Palette Index, which appears after the tool descriptions.

Note Tools that create tags insert the tag at the insertion point unless otherwise specified. Such tools also place an end tag automatically where appropriate.

You should already be familiar with HTML before using BBEdit's HTML tools. The dialogs BBEdit displays will help you associate correct attributes with each tag, and provide shortcuts to help you enter information, but they do not (and cannot) tell what the final results of your markup will be. There is no substitute for knowing HTML.

Tag Maker

Tag Maker is BBEdit's context-sensitive HTML authoring tool. When you choose it from the menu or the palette, or invoke it by pressing Command-M, it provides a list of the tags that are valid in the current HTML context of the insertion point and then lets you insert and configure one. For example, if the insertion point is positioned inside the document's header section (delineated by the <HEAD> and </HEAD> tags), Tag Maker displays the following list of tags:



Choosing, for example, BASE inserts a <BASE> tag at the insertion point. Choosing TITLE inserts a <TITLE></TITLE> pair, with the insertion point positioned between the two tags for easy entry of a title.

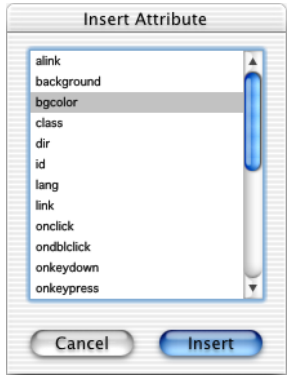
If you hold down the Option key while clicking the Insert button, Tag Maker automatically displays a follow-up dialog for editing the attributes of the new tag, if the tag takes attributes and BBEdit has a tag editing dialog for it.

When there is only one tag permitted in the current context, Tag Maker does not display the Insert Tag dialog, but simply inserts the appropriate tag at the insertion point. (Choose Undo from the Edit menu if this tag is not what you expected.) If there are no valid tags in the current context, Tag Maker sounds the system alert beep.

Tag Maker also works with CSS. With the insertion point in a CSS selector or declaration, Tag Maker will open a list of valid properties. Option-click while clicking the Insert button and Tag Maker will open a follow-up dialog for editing the property (for classes that BBEdit offers editing dialogs). Invoking Tag Maker when the insertion point is not within a CSS selector will create a new skeleton rule set.

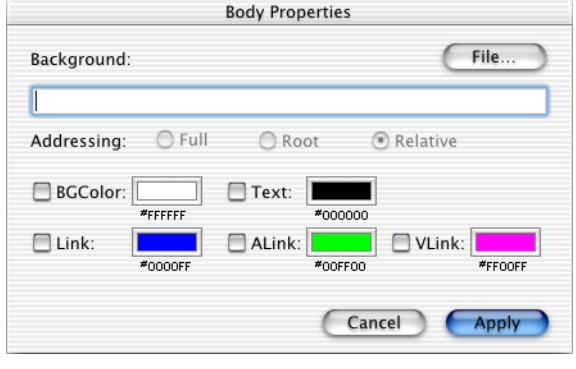
Tag Maker is also available through contextual menus. Simply Control-click at any point in your markup, and BBEdit will open a contextual menu that includes all valid attributes or properties for the context of the insertion point.

Once you have used Tag Maker to enter a tag, you can place the insertion point inside a tag and invoke Tag Maker again to show a list of available attributes for the tag. (Attributes that are already present in the tag are not shown in the list.) The list below, for instance, shows attributes of the <BODY> tag (under HTML 4.0 Transitional). Selecting an attribute from the list adds it to the tag and places the insertion point at the proper location for typing a value.



Edit Tag

Another way to add or edit the attributes of a tag is to place the cursor inside the tag and choose Edit Tag from the Markup menu or the HTML Tools palette. Choosing Edit Tag displays a dialog appropriate to editing the most common attributes used with the current tag. (The dialog shown is for a BODY tag; dialogs for other tags will look different.)



Edit Tag also works with CSS. Choose Edit Tag while the insertion point is within a selector's property or value, and BBEdit will display an appropriate dialog for editing many common properties.

Close Current Tag

new in 7.0 The Close Current Tag command inserts a closing tag to match the nearest opening tag preceding it. If the closing tag is placed on a new line, it will use the same indent level as the opening tag. For instance, if the insertion point is preceded by a <P> (Paragraph) tag plus some text content, Close Current Tag will insert a matching </P> tag to close the paragraph.

Note If you frequently work with HTML documents, you may want to assign a key equivalent to this command using Set Menu Keys.

Balance Tags

When Balance Tags is chosen, BBEdit expands the selection to encompass the content of next outermost set of enclosing tags. The easiest way to understand how this works is to see it in action. Place the insertion point in an HTML document's <TITLE> element and choose Balance Tags. The title will be selected, since it lies between the tags <TITLE> and </TITLE>. Choose Balance Tags again, and BBEdit selects everything between <HEAD> and </HEAD>, the next set of enclosing tags outside the <TITLE> element. Choosing the command once more will select everything between <HTML> and </HTML>.

Use this command to quickly select an element for editing or just to check to see whether all your nested elements are formed correctly. If BBEdit sounds the system alert beep when you expect it to select text, it cannot find a matching set of tags around the selected text.

Document Type

Choosing Document Type brings up a dialog that allows you to select the desired document type (DTD) for the current document. If the document already contains an SGML <!DOCTYPE> declaration, this will be used as the default. You may choose any of BBEdit's supported document types or enter one of your own.

Character Set

Choosing Character Set brings up a dialog that allows you to enter a character set specification for the current document. To insert this specification, check the Meta Tag box, choose a character set from the pop-up menu of supplied standard types or type in a character set name, and click Apply. To remove any existing character set specification, deselect the Meta Tag box and click Apply.

Note You can choose which character sets appear in the pop-up menu by using the Text Encodings panel of the Preferences window.

Optionally, if the current document is an XML document, you can insert an XML Declaration (either alone or in addition to the Meta Tag) by checking the XML Declaration box and clicking Apply.

CSS Submenu

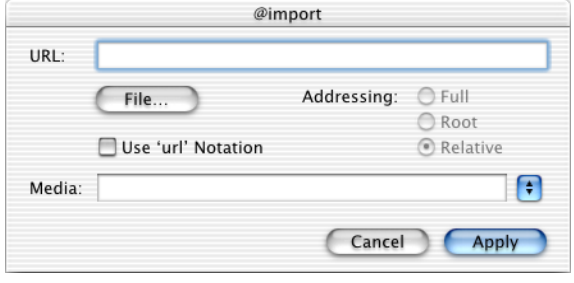
This submenu allows you to create, edit, and format Cascading Style Sheet markup. BBEdit has built-in support for CSS. When you are editing stand-alone CSS files or HTML files with embedded CSS, syntax coloring is available, and the Function pop-up menu in the status bar lists CSS selectors, as well as CSS files referenced by @import directives and <link> tags. Choose an external stylesheet from the Function pop-up and BBEdit will open that stylesheet for editing.

The CSS function parser supports the following syntax for laying a mark in the function menu:

```
/* bbmark string to appear in the menu */
```

@import

The @import directive instructs a Web browser to load an external style sheet. This dialog box allows you to select a file (or drag and drop one from the Finder) and choose whether to use the optional "url" notation for specifying the location of the style sheet. (Remember that @import must come before other CSS rules inside a <style> tag or in a stand-alone CSS document; otherwise it will not work.)



Format

The CSS Format command will reformat your CSS markup for easier reading.

In stand-alone CSS files, if there is a selection range, only the selected text is formatted. If there is no selection range, the whole file will be formatted.

In HTML files with embedded CSS, if there is a selection range, only the selected text will be formatted. If there is no selection range, BBEdit will format all CSS in the <style></style> tag pair that encloses the insertion point. If the insertion point is outside a <style></style> tag pair, or if the selection range spans a <style></style> tag pair, the formatter will simply beep.

When formatting CSS embedded into HTML, BBEdit will indent the CSS based on the indent level of the opening <style> tag, plus one additional tab stop for better readability.

There are two preference settings in the HTML Markup preference panel that control how the CSS formatter and markup tools place the braces for block markup:

- The New Line Before Block Start checkbox controls the placement of opening braces. If the checkbox is on, you get this style:

```
H1
{
    color: green;
}
```

  If it's off, you get:

```
H1 {
    color: green;
}
```

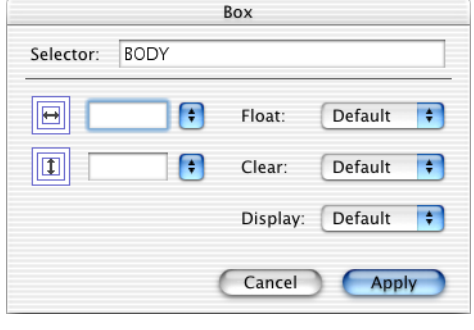
- The Put Simple Rules on One Line checkbox will format a single line of CSS like this:

```
H1 { color: green; }
```

BBEdit's CSS markup tools (listed below) use the same rules for formatting as does the Format command.

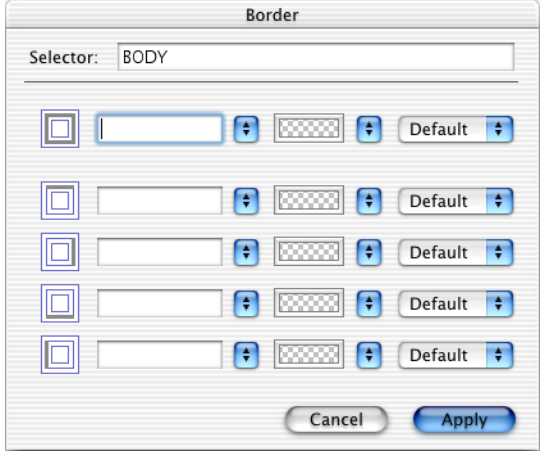
Box

The Box dialog allows you to specify a selector's width and height properties, as well as the properties for float, clear, and display.



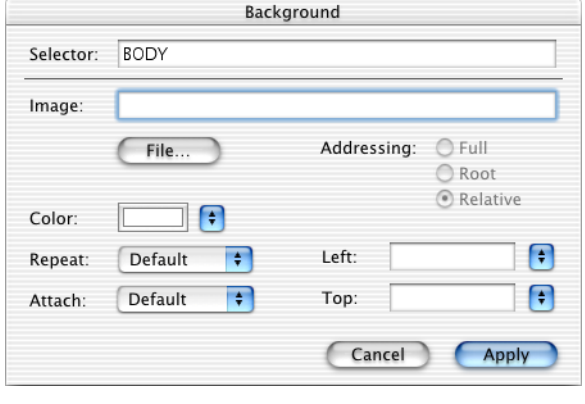
Border

The Border dialog allows you to edit the border-width, border-color, and border-style properties for a selector. The first row lets you specify values that apply to all four sides. The color buttons let you select colors from your preferred Web color palette (as specified in the HTML Colors preference panel); the pop-up menus next to them let you select colors by name. The icons on the left side of the dialog represent (from top to bottom), the entire border, top, right, bottom, and left.



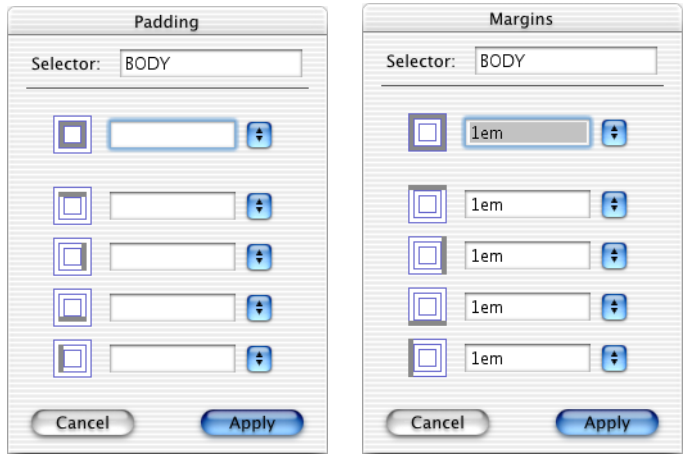
Background

The Background dialog allows you to edit background-image, background-color, background-repeat, background-position, and background-attachment properties. The Image field allows you to select an image file by clicking the File button, or by using drag and drop from the Finder.



Padding/Margins

These similar dialogs allow you to edit the padding and margin properties. In both cases, the icons on the left in the dialogs represent the entire box, top, right, bottom, and left, respectively.



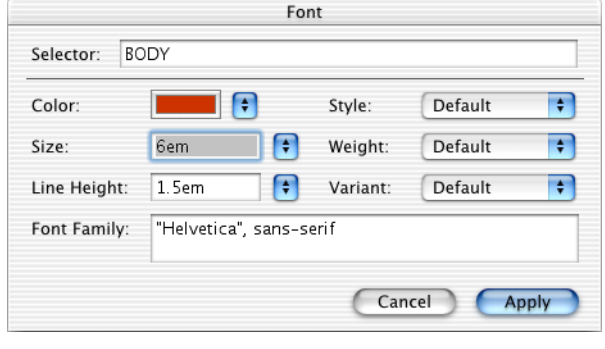
When you are working with the individual margin fields in these dialogs as opposed to the overall value, they behave the same way CSS value replication does:

- If right is missing, it takes on the value of top
- If bottom is missing, it takes on the value of top
- If left is missing, it takes on the value of right

so an empty field has special meaning - it means “replicate the related value”. If you want to specify a value for any given side, you must enter it explicitly.

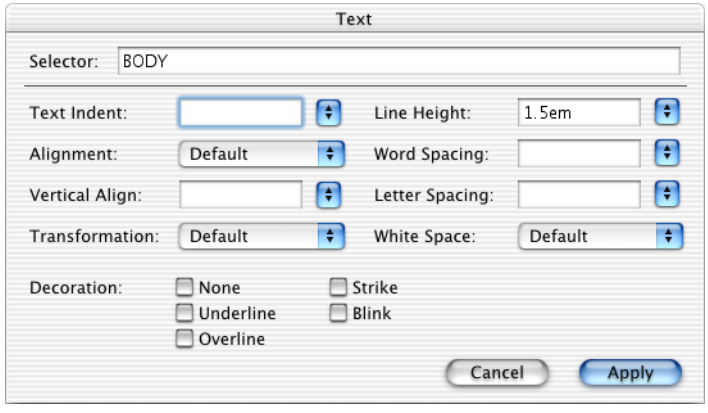
Font

The Font dialog allows you to edit values for the following font properties: color, font-size, line-height, font-family, font-style, font-weight, and font-variant. Note that BBEdit will parse the “font:” shortcut property, but never generates it; instead, BBEdit generates exploded values for font-style, font-variant, font-family, and font-weight.



Text

The Text dialog allows you to edit the following text properties: text-decoration, text-indent, text-align, vertical-align, line-height, text-transform, word-spacing, letter-spacing, and white-space.



Body Properties

This submenu allows you to edit attributes of the BODY tag in the current document, including the background image, background color, text color, link color, active link color, and visited link color. You can specify the background image by typing or by clicking the File button. Link, background, and text colors are chosen from the 216-color "Web-safe palette" that appears when you click one of the color swatches. (Option-clicking a color swatch will bring up the system color picker, so you can select colors that are not in the Web-safe palette.)

Head Elements

This submenu allows you to add tags that are valid in the document's head. The tag is inserted at the current insertion point, even if the insertion point is not a contextually valid location for the tag.

Base

The BASE tag determines the default location of documents referenced in the current document. You will be prompted to enter the Href (the document or folder that all relative links in the document should be considered relative to). You can enter the Href by typing it into the supplied field or by clicking the Folder button to select a folder on your hard disk. A set of radio buttons offer the choice of full, root, or relative addressing. The Target field determines the frame in which hyperlinked documents will appear by default. Both fields are optional.

Link

The LINK tag tells the browser about a document related to the current document. The most common use for this tag is to point to an externally defined CSS stylesheet document. You can choose to indicate whether this link defines a REL (forward relation) or REV (reverse relation), the type of the relation (for example, a stylesheet), the media, the URL of the referenced file (including full, root, or relative addressing), and optional Type, Hreflang, Target, and Charset attributes.

Meta

META tags are used to define browser-specific or optional information that is not a part of the HTML specification. You can choose to create either a NAME or an HTTP-EQUIV variation of the META tag. The latter is frequently used for "client-pull" applications in browsers that support it, but more generically it makes most browsers behave as if the specified line was received as part of the HTTP protocol header. After choosing the type of META tag and the desired value of the NAME or HTTP-EQUIV field, enter a value for the tag's CONTENT attribute and optionally its SCHEME attribute. (You can choose from some common values for the NAME field by using the pop-up menu to the right of that field. If the HTTP-EQUIV value is "content-type", you can also choose from among some common values for the Content field by using the pop-up menu to its right.)

Script

This command begins a section of client-side script code (by default, JavaScript, although some browsers support other scripting languages). You can choose to execute a script contained in an external file by entering a URL in the Source field (click File to choose the file using an Open dialog). You can also enter values for the TYPE of script, the script LANGUAGE it is written in, and the character set or CHARSET of the script. Mark the DEFER checkbox to add a DEFER attribute.

Note You can choose which character sets appear in the Charset pop-up menu by using the Text Encodings panel of the Preferences window.

Noscript

This command begins a section of HTML to be displayed only if the Web browser does not support client-side scripting; often used to provide alternate content following a <SCRIPT> block. A matching </NOSCRIPT> tag is also inserted.

Style

This command begins a stylesheet declaration. You will be prompted to enter the type and title of the stylesheet, and optionally select the Media type it is to be used with.

Block Elements

This submenu lets you add HTML elements that behave as paragraphs or other types of text blocks. Since many block elements can be containers for other elements, most have an explicit or implicit ending tag (for example, </P> to close a paragraph) as well as an opening tag (for example, <P>). If text is selected when one of these commands is chosen, these opening and ending tags are placed before and after the selection.

Paragraph

This command begins a new paragraph element. You can specify alignment, ID, a class (for obtaining formatting cues from a stylesheet), and inline CSS style information. If a selection exists, each paragraph in the selection has <P> and </P> tags inserted around it.

Div
This command begins a new division. A division is a generic block of text containing one or more paragraphs (or other block elements) that all have some type of structural attribute in common. Use <DIV> when no predefined block type is appropriate. You can specify alignment, ID, a class (for obtaining formatting cues from a stylesheet), and inline CSS style information.

Horizontal Rule
This command inserts a <HR> tag. You can specify the alignment, the thickness (size) of the rule, its width, and whether it contains a three-dimensional "shade."

Heading
This command inserts a heading of any level and allows you to specify the alignment of the heading.

H1 through H6
These commands insert a heading of the specified level. (The alignment attribute used will match the last one chosen when using the Heading tool.)

Address
This command inserts an <ADDRESS> block. The formatting of this element is browser-dependent but it is usually used to indicate that a block of text is a postal address.

Blockquote
This command inserts a block quote—that is, several lines of text that have been quoted from another document. (Most browsers display this as indentation, leading many authors to use this tag to indent a section of text, although stylesheets are a more correct and flexible way to accomplish this.) You may optionally indicate the document being quoted, if it is available on the Web, using the Cite field.

Center
This command inserts a block centering tag. This tag, while permitted in current HTML specifications, is deprecated since it includes no information about the content being centered. It is generally considered better form to use stylesheets or P or DIV tag ALIGN attributes instead.

Deleted Text
This command inserts a block formatted to indicate that the enclosed text has been deleted (usually with a horizontal line through it—that is, "struck out"). You may optionally specify a citation (indicating a reference to another file) and a date and time.

Inserted Text
This command inserts a block formatted to indicate that the enclosed text has been inserted (usually by underlining the text). You may optionally specify a citation (indicating a reference to another file) and a date and time.

Noscript
This command begins a section of HTML to be displayed only if the Web browser does not support client-side scripting; it is often used to provide alternate content following a <SCRIPT> block. A matching </NOSCRIPT> tag is also inserted.

Preformatted

This command begins a section to be reproduced with line breaks as specified in the HTML document. (Normally, browsers convert carriage returns to white space for display, breaking lines only at <P> or <BR> tags.) Most browsers use a monospaced font for this type of block.

Lists

These commands add numbered or bulleted lists to your HTML documents. If text is selected, the selected text is converted to a list, with each line (terminated by a carriage return) becoming a list item.

List

This command inserts a list. You can choose the type of list (unordered, ordered, definition, menu, or directory) and also the type of marker for an unordered ("bulleted") list. You can also suggest a compact display format for the list. When converting existing text to a list, you can choose to ignore blank lines in the text being converted, to mark up only list items (and not insert the list header), and whether to indent the list items. When converting text to a definition list, DT (term) and DD (definition) tags are applied to alternating lines in the selection.

Unordered/Ordered/Definition/Menu/Directory

These commands convert the selected text to the indicated type of list, or insert a new list (as with the List command) using the options set in the last List dialog displayed.

List Items

This command converts selected text to list items (one line becomes one item), or inserts an <LI> tag if no text is selected.

Tables

The commands on this submenu all have to do with building HTML tables. HTML tables are frequently used for layout purposes as well as for the display of tabular data, although strictly speaking their use for layout should be avoided as much as possible. BBEdit fully supports HTML 4 tables, which are considerably more flexible than the HTML 3.2 tables many users may be familiar with. If some tags or attributes in this section are unfamiliar to you, we strongly encourage you to study the HTML 4 standard before attempting to use them.

Table

This command inserts <TABLE> and </TABLE> tags around the selected text. You can specify border, width, spacing, padding, frame, ruling, alignment, and background color. If there is no selection, you can have BBEdit generate a "shell" for the table (including all <TR> and <TD> elements inside the table for the number of rows and columns you specify) and optionally insert placeholder "label" text in each cell.

Row

This command inserts <TR> and </TR> tags in the document, before and after the selection if there is one. You can specify the desired horizontal and vertical cell alignment and a row background color. If horizontal alignment to a specific character is specified, you can also indicate the character that determines alignment and the character offset to the first alignment character in the line.

TD, TH

These commands inserts a table data cell element or a heading cell element, respectively. (Both have the same options, though most browsers render TH elements differently from TD elements.) You can specify the width and height of the cell, the number of rows or columns it should span, its vertical and horizontal alignment (including alignment to a character and the offset to the first such character), whether the text in the cell should be permitted to wrap, the background color of the cell, and the scope of the header information in this cell, if any. You can also specify the axes, an abbreviated version of the cell's content, and which header cells contain information about the current cell. Many of the less familiar and infrequently used attributes have use in certain applications such as speech accessibility. To provide maximum accessibility for tabular data, we suggest you consult the HTML 4 specification.

Caption

This tag specifies a caption for a table. You may also optionally specify the caption's vertical alignment.

Colgroup, Col

These tags are used to define column and column groups. Browsers that understand HTML 4 tables can, for example, be told to format a number of columns the same way, or to place rules between column groups, using this construction. The contents of a column group may be one or more <COL> elements (or none at all, if the SPAN attribute is used). You can specify the span of the column or group, its desired width, and its vertical and horizontal alignment. Cells within this column group may inherit some or all of these attributes depending on the attributes of the individual <TD> or <TH> elements.

THead, TFoot, TBody

These tags defines an optional table section element. They are new in HTML 4 and can be used independently of the <TH> tag; the latter indicates that particular cells should be displayed in a heading "style" (usually displayed by browsers as boldface). <TH> may be used anywhere in a table that a "heading look" is desired. In contrast, these three related tags define the logical divisions of a table. Browsers might hold the table's header or footer fixed on the screen while scrolling a lengthy body up and down, for instance. All three tags allow you to select vertical and horizontal alignment, which may be inherited by cells inside the element depending on the attributes of <TR>, <TD>, and <TH> tags.

Convert to Table

This command provides a quick way to convert tab-delimited or comma-delimited lines of text to tables. You must specify the delimiter to be used (either tabs or commas), and you can optionally have the entire first row of the table or the first cell of each row converted to <TH> rather than <TD> elements. If One Cell Per Line is marked, each cell will be placed on its own line in the resulting HTML; otherwise cells will be placed on a single line.

Forms

This submenu contains commands that help you build HTML forms, which are used for accepting user data for processing by a client-side script or a server-side CGI program (or other server-side technology, such as Active Server Pages).

Form

This tag defines a form. The Method can be either GET (encoding the form data in the URL) or POST (sending the form data separately after the HTTP transaction header). The Action should be the URL of the CGI program (or other server-side script, such as ASP). Enctype and Accept-Charset define the encoding type and character set for the transaction (usually, you will not need to use these fields). Use the On Submit and On Reset fields to enter the names of JavaScript handlers to be used for the Submit and Reset buttons, respectively. The Target field sets the frame to be used for the page returned by the CGI.

Button

This tag creates a form button. Choose a type (Submit, Reset, or Button), specify a name and value for the form element, and set optional attributes such as Disabled, Tab Index (the order in which the button will be reached by the Tab key), and Access Key (the key the user can press to activate the button in the browser). (The latter two options are HTML 4 features and may not work on all popular browsers.) You can also enter the names of JavaScript onFocus and onBlur handlers for the button.

Field Set, Legend

In HTML 4, you can group your form's fields and other controls into sets of related fields by using the FIELDSET container. Within the FIELDSET container, the LEGEND tag is used to define a title for the field set. Browsers differ in how they represent field sets visually, but some browsers may draw a rectangle around the related controls as in dialog boxes. In this case the Align attribute of the LEGEND tag can be used to set the alignment of the legend relative to the visual representation of the field set. (Browsers that do not support these tags will ignore them, and the contents of the LEGEND container will be displayed as any other text.)

Input

This tag defines an input field, which can be a text or password input, various types of buttons, and even files, images or hidden fields. Specify the name and the default value of these fields, and, if applicable, their size, maximum length, tab index, access key, and disabled or read-only attributes. (Disabled, Read Only, Tab Index, and Access Key are HTML 4 features and may not be supported by all popular browsers.) You may also specify handlers for the JavaScript onFocus, onBlur, onSelect, and onChange handlers.

Label

HTML 4 allows you to specify that text next to a control is a Label, and in browsers that understand the tag, clicking the label associated with a button activates the corresponding control. BBEdit lets you create a <LABEL> tag, specifying the name of the control it should be associated with, an optional keyboard equivalent to activate the control, and onFocus and onBlur JavaScript handlers.

Select

This tag defines a scrolling list or pop-up menu. Enter the name of the control, the number of items to display (leave the size blank for a pop-up menu rather than a scrolling list), and whether the list allows multiple items to be selected. Optionally mark the control as disabled and specify onFocus, onBlur, and onChange handlers.

Option Group
Using the <OPTIONGROUP> tag, you can create submenus in pop-up menus in browsers that support them. All <OPTION> tags within an <OPTIONGROUP> container are displayed as items cascading from the specified submenu label. (In browsers that do not understand <OPTIONGROUP>, users will see a simple straight list of all defined options.)

Option
This tag defines an option in a pop-up menu or a scrolling list. Enter the desired label and value for the option, and mark the Selected checkbox to make the option the default or initial choice.

Text Area
This tag defines a scrolling text area field for entering large amounts of data. You can specify the name of the file, its size in rows and columns, and optional HTML 4-only attributes such as Disabled, Read Only, Access Key, and Tab Index. You can also specify script handlers for onFocus, onBlur, onSelect, and onChange events.

Inline Elements
Inline elements are HTML elements that can appear as part of a paragraph, such as anchors, images, applets, client-side scripts, image maps, and more.

Anchor
This command inserts an HTML anchor (<A>) tag. Anchors can either be hyperlinks or be used as the target of hyperlinks to provided multiple targets on a single page. The anchor must have an associated URL in the HREF field to be a link; it must have a name in the Name field to be a target. The Target field is used to specify which frame the linked page should appear in.

When specifying a URL, you can choose a recently used URL from the Recent URLs pop-up menu, or choose another file from the same folder as the current document using the Current Folder pop-up menu. If you hold down the Option key, the Recent URLs pop-up menu will turn into a pop-up menu containing Internal Anchors in the current document. If you click the File button, you will be prompted to choose a file from an Open dialog. Normally, all types of files will be displayed here. However, if you select the Only Show HTML and Image Files checkbox at the bottom of the Anchor dialog, you will only see images and files whose names match those defined as HTML in BBEdit's Languages preference panel.

Alternatively, you can drag and drop a file into the HREF field in order to insert its path and name.

BBEdit displays a warning message when the URL does not exist on your computer or is outside the scope of your site; these warnings can be disabled using the checkboxes at the bottom of the dialog.

Image
This command inserts an <IMG> tag to display an image. As with the Anchor tag, you can select the Source from the Recent URLs or Current Folder pop-up menus, by typing a URL, or by clicking the File button. If the Canto Cumulus image cataloging tool is running on your computer, you can also click the Cumulus button to choose an image from Cumulus's catalog, or you can use drag and drop.

After choosing an image file, you can specify alternate text (which will appear in browsers that do not support images or for users who are surfing with image-loading turned off), enter the Size of the image, select the amount of horizontal and vertical Space for wrapping around the image, and choose the thickness of the border and the image's alignment. (Image height and width should be specified whenever possible to speed layout of the page in the browser; BBEdit will enter these values for you automatically when you choose an image file.) You can also mark the Is Map checkbox to use a server-side image map or the Use Map checkbox to use a client-side image map embedded in the HTML document.

Applet

This command inserts the <APPLET> tag for specifying a Java applet. You will need to specify the location the folder that contains your main Java class file (the codebase) as well as the name of the main class file. If the file is in a .ZIP or .JAR archive, you can specify its name here as well. If you will control the applet via a client-side script, enter a name for it. You should always enter the desired size for the applet's display area. You can also specify alignment and white space around the applet, along with ALT text to be displayed if the applet cannot be used.

Object

The <OBJECT> tag is a generic tag for including almost any type of data in a page, including images and Java applets. (It can also be used to insert ActiveX controls and data intended to be used by plug-ins.) However, it is an HTML 4 tag and may not be supported in all popular browsers. For this reason we suggest using <IMG> and <APPLET> for those types of objects and use <OBJECT> only for embedding other types of data, such as that used by plug-ins. For an example of this, see the Web Design Group's HTML Help reference page:

`http://www.htmlhelp.com/reference/html40/special/object.html`

The <OBJECT> tag, like the <IMG> and <APPLET> tags, allows you to reserve screen space in the browser window, recommend an amount of white space between the object and surrounding text, align the object, set its border, specify alt text to be displayed if the object cannot be displayed, and so forth. You will also need to specify at least the codebase and class ID of the object for ActiveX controls, and fill in the Data field for embedded objects such as Shockwave animations which will be handled by plug-ins. The Standby field can be used to tell browsers a text message to be displayed while the object is loading. For more information on the <OBJECT> tag, consult the HTML 4 specification.

Param

To pass parameters to a Java applet, ActiveX control, or plug-in, the <PARAM> tag can be used between the <OBJECT> and </OBJECT> (or <APPLET> and </APPLET>) tags. Each parameter to be passed to the object requires a separate <PARAM> tag. You must specify the name and value of each parameter; the actual parameter names and values required will vary depending on the object being embedded.

Script

This tag begins a section of client-side script code (by default, JavaScript, although some browsers support other scripting languages). You can choose to execute a script contained in an external file by entering a URL in the Source field (click File to choose the file using an Open dialog). You can also enter values for the TYPE of script, the script LANGUAGE it is written in, and the character set or CHARSET of the script. Mark the DEFER checkbox to add a DEFER attribute.

Note You can choose which character sets appear in the Charset pop-up menu by using the Text Encodings panel of the Preferences window.

Map

This tag embeds a client-side image map in the document. You must enter a name by which the map can be referenced in the Use Map attribute of the Image tag. Individual clickable areas within the image map are provided by the <AREA> tags inserted between the <MAP> and </MAP> tags.

Area

This tag defines a clickable area within a client-side image map. Each clickable area requires a separate <AREA> tag. You will need to specify the document to be loaded when the area is clicked (or mark the No HREF checkbox to cause clicks in the area to be ignored), along with its Target frame if the page is being used in a frameset. You can choose the desired map shape (rectangular, circular, polygonal, or the default URL) using the Shape pop-up menu and enter the desired coordinates of the shape in a comma-separated list in the Coords field. (For rectangles this is in the order left, top, right, bottom; for circles it is in the order X, Y, radius. For polygons this should be a comma-separated list of coordinates in X, Y form.) You can also set the tab index of the field for keyboard control on browsers that support it. JavaScript onFocus and onBlur handlers are also supported.

Convert to Client Side Map

This command converts the selected text, which should be a server-side image map file in NCSA server format, to a client-side image map. You must specify a name for the converted imagemap.

Break

This command enters a line break tag, <BR>, into the document. If multiple lines are selected, a line break tag will be inserted after each.

Font

This tag selects the font, size, and/or color for the selected text. This tag is deprecated and should generally not be used; stylesheets are a more flexible and more content-oriented way of achieving this end.

Base Font

This tag selects the default font, size, and/or color for the text in this document. Like <FONT>, this tag is deprecated; it is considered better form to use stylesheets.

Bidirectional Override
This command inserts a <BDO> tag to note that the enclosed text is in a language that should be rendered in a different direction (either left-to-right or right-to-left) than the default text order for the document's primary language. You can specify the desired text order and the language, so that savvy browsers can switch fonts or script systems to display the text correctly.

Quotation
This command marks the selected text as a quotation. Use this only for short quotes within a paragraph; use <BLOCKQUOTE> for quotations consisting of a paragraph or more of text.

Span
This command marks the selection as belonging to a certain class of information—such as a book title—usually so that its text style can be retrieved from a stylesheet. (In contrast with <DIV>, which marks paragraph-level classes, <SPAN> marks character-level classes.) You will be prompted for an ID for this span, a class name (which should correspond to a stylesheet entry), and inline style information. All are optional.

Subscript
This command marks the selected characters as a subscript (lowered below the baseline).

Superscript
This command marks the selected characters as a superscript (raised above the baseline).

Phrase Elements
Phrase elements are HTML tags that mark sentences or phrases within a block element (such as a paragraph) with certain content-related styles, such as emphasis, strong emphasis, citation, and so on. Indirectly this determines the displayed format of the enclosed text (although exactly what "emphasis" and so on mean is left up to the browser or the stylesheet).

Abbreviation
The enclosed text is an abbreviation.

Acronym
The enclosed text is an acronym.

Citation
The enclosed text is a citation of another document.

Computer Code
The enclosed text is computer source code.

Deleted Text
This command inserts a block formatted to indicate that the enclosed text has been deleted (usually with a horizontal line through it—that is, "struck out"). You may optionally specify a citation (indicating a reference to another file) and a date and time.

Defined Term
The enclosed text is term defined in a glossary.

Emphasis
The text should be displayed with visual emphasis (most browsers interpret this as italic text).

Inserted Text
This command inserts a block formatted to indicate that the enclosed text has been inserted (usually by underlining the text). You may optionally specify a citation (indicating a reference to another file) and a date and time.

Input Text (Kbd)
The enclosed text is text to be entered on a computer keyboard (used in instructions).

Sample Output
The enclosed text is sample output from a computer program (used in instructions).

Strong Emphasis
The text should be displayed with strong emphasis (most browsers interpret this as boldface).

Variable
The text is a placeholder in an instruction or tutorial, and should be replaced with an actual value of the appropriate type before actually performing the indicated operation.

Font Style Elements
Like Phrase Elements, Font Style Elements mark relatively short pieces of text within a block element. However, they are concerned more with the appearance of the text than its structural function in the document.

Big
This displays the enclosed text in a larger font than usual.

Small
This displays the enclosed text in a smaller font than usual.

Bold
This displays the enclosed text in boldface type.

Italic
This displays the enclosed text in italic type.

Strike-Through
This displays the enclosed text in a strike-through style.

Teletype Text
This displays the enclosed text in a monospaced font, as on a computer terminal or teletype.

Underline
This displays the enclosed text in an underlined style.

Frames

The commands in the Frames submenu help you design documents that use frames. The first document loaded by the browser contains at least one <FRAMESET> tag and one or more <FRAME> tags, which specify the number and sizes of the desired browser window subdivisions and indicate the URLs of the files to be loaded into each.

Frame Set

This defines a frame set, a series of one or more frames. You indicate whether the frame set divides the browser window vertically (ROWS) or horizontally (COLS), and then indicate the size of each frame in a comma-separated list, using * to tell the browser to use whatever space is left over from the other specified frames.

Frame sets can be nested. For example, if you want to create a framed Web page with three rows, with the middle row divided into two independent columns, you would first define a frame set consisting of three rows. Instead of defining the second row with a <FRAME> tag, however, you would open another <FRAMESET> tag there, this time to specify the two columns for the middle frame (which would then be specified by <FRAME> tags).

Frame

This defines a frame in a frame set document. You will need to specify the URL of the file to be displayed in this frame (either using the button, or by drag and drop). If the frame will be targeted by links in another frame, you will also need to give the frame a name. You can optionally specify a long description for the frame, choose whether the frame can be scrolled, and indicate whether the user should be able to resize the frame. You can also set margins and borders for the frame. (Borders are the visible lines between frames. Margins determine how far each frame's content appears from its border or from the window edge.)

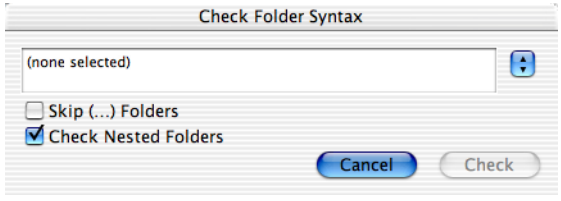
No Frames

HTML markup included between the <NOFRAMES> and </NOFRAMES> tags is displayed by browsers that do not support frames. This is where you should include a link to a non-frame (or text-only) version of the site. Although many current browsers support frames, some users do not like the feature and intentionally disable it in their browser.

Check

The Check submenu contains utilities for finding errors in your HTML markup and document links. You can run syntax or link checks on the current document, a specified folder, or the current site (as defined in the HTML Web Sites preference panel). You can also perform a Balance Tags operation on the current document.

When you are checking a folder or a site using these tools, a dialog like the one below appears.



The pop-up menu to the right of the path box includes all of the web sites that you have specified in the HTML Web Sites preference panel; choosing any of these selects its designated site root folder for checking. The Other entry on the pop-up menu displays an Open dialog, allowing you to navigate to and choose any other desired folder. (You can also drag a folder from the Finder directly into the path box.) The Skip (…) Folders checkbox specifies that subfolders whose names are enclosed in parentheses should not be checked; Check Nested Folders indicates that nested folders should be included in the check.

If a Check Syntax or Check Links operation generates any errors or warnings, BBEdit will display an error results browser listing. For more details on the new error results browser format, please refer to Chapter 9.

Syntax

A syntax check validates your HTML document to the specification defined in the <!DOCTYPE> SGML prolog at the top of the HTML document. Errors are displayed in an error results browser. Scroll through the list at the top of the window to see the errors that have been found; click to see the text that caused the error in the lower part of the window. Double-click an error message to open the file for editing.

Note that an HTML document can display the way you expect it to in a browser and still contain invalid HTML. Browsers are designed to be lenient in the markup they accept, so you can get away with a certain amount of "sloppy" markup. However, producing well-formed (syntactically correct) HTML documents is the best way to assure that your document will display in some reasonable fashion in a wide variety of Web browsers, even those you have not tested the page in.

Links

This command causes BBEdit to scan your document, or a folder of documents, looking for links and object references (such as images and Java applets) that cannot be resolved. Note that BBEdit only looks at pages on your site as defined in the HTML Web Sites preference panel, not at any links that go offsite. (BBEdit will, in fact, generate warnings for offsite links unless you disable the Remote Links warning in the HTML Tools preferences.)

Update

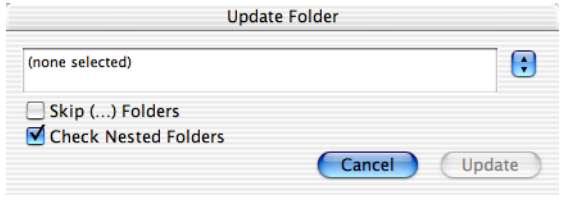
The Update submenu contains commands for updating IMG tags, includes, and placeholders in the current document, the selected folder, or the current site (as selected in the HTML Web Sites preference panel). BBEdit displays a results browser after the operation so you can see what was changed.

For more details on the results browser format that BBEdit displays, please refer to Chapter 9.

Choose the Document, Folder, or Site command from the Update submenu to update all includes and placeholders in the selected set of file(s). (Appendix C contains information regarding the use of placeholders.)

Choose the Document Images, Folder Images, or Site Images command from the Update submenu to update the HEIGHT and WIDTH attributes of image tags (and optionally to insert empty ALT attributes when missing) in the selected set of file(s).

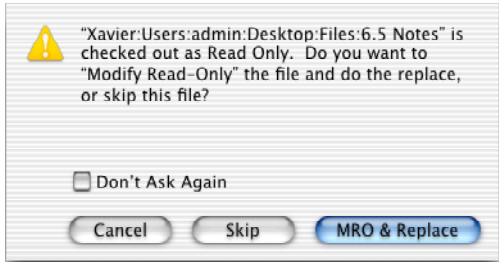
When you are updating a folder or a site using either of these sets of tools, a dialog like the one below appears.



The pop-up menu to the right of the path box includes all of the web sites that you have specified in the HTML Web Sites preference panel; choosing any of these selects its designated site root folder for updating. The Other entry on the pop-up menu displays an Open dialog, allowing you to navigate to and choose any other desired folder. (You can also drag a folder from the Finder directly into the path box.) The Skip (…) Folders checkbox specifies that subfolders whose names are enclosed in parentheses should not be updated; Check Nested Folders indicates that nested folders should be included in the update.

Updating Files with Projector CKIDs

During an Update operation, whenever BBEdit attempts to modify a file containing a Projector 'ckid' resource that is designated Read-Only, it will display the following dialog asking you how to handle the file:


"Xavier:Users:admin:Desktop:Files:6.5 Notes" is checked out as Read Only. Do you want to "Modify Read-Only" the file and do the replace, or skip this file?
Don't Ask Again
Cancel
Skip
MRO & Replace

Clicking Cancel will stop the Update operation and leave the current file untouched. Clicking Skip will cause BBEdit to skip this file only (leaving it untouched), and continue the multi-file replace operation. Clicking the MRO & Update button will cause BBEdit to mark the file Modify Read-Only, update the file, and continue the Update operation.

If you select the Don't Ask Again option before clicking Skip or MRO & Update, BBEdit will apply the same action to all files with this Projector state that it encounters during this (and only this) Update operation.

Includes

The Includes submenu contains commands for inserting one-time include directives, "persistent" include directives, and placeholders. See Appendix C for more information.

Choosing Include or Persistent Include prompts you to choose a file using an Open dialog and then inserts the appropriate markup. Choosing Placeholders displays a scrolling list of available placeholders; selecting one and clicking Insert places it into the document.

Utilities

The Utilities submenu contains commands for automatically editing the current HTML document for ease of editing and for consistency.

Format

This command formats the current HTML document for easier editing. The appearance of the document in a browser is generally not affected (except in the case of Document Skeleton). You can choose from among the following:

- Hierarchical: Nested HTML structures are indented

Note This command may add white space, which can affect display in a browser

- Gentle Hierarchical: Same as Hierarchical, with less indenting
- Plain: Places each tag on a separate line with no indenting
- Compact: Absolute minimum white space
- Gentle Compact: A slightly more human-readable version of Compact
- Source Format Profile: Formats the document according to the Dreamweaver Source Format Profile selected in the HTML Markup preference panel (if any)
- Document Skeleton: A hierarchical view with all non-tag content removed
- Don't Reorganize: Allows normalizing of case, quote, and entity settings, as well as encoding entities within attributes, without otherwise changing the existing structure

You can also have the Format command operate on the whole document or only the selection, normalize the tags to uppercase or lowercase (according to your settings in the HTML Tools preferences), normalize quote marks around attributes, and encode special characters, or entities, found in attributes.

If you choose the "Format…" command (with the ellipsis), BBEdit displays a dialog allowing you to choose the formatting options. If you choose the Format command (without the ellipsis), BBEdit uses the previous options.

Optimize

This command reformats the document to use the absolute minimum of characters while remaining syntactically valid. You will have difficulty editing your document in this format (in fact, if you do not have Soft Wrap turned on in the text options, you might think most of your document has vanished, because the command strips out all line breaks), but rest assured that your document will appear the same in your browser as it always has. Use one of the Format commands discussed above to put your page back into an editable format if you need to make changes. This command also applies the various Cleaner tools automatically.

Translate

This command allows you to translate plain text to HTML or vice versa. The dialog that appears gives you flexible options for translating Macintosh characters to HTML entities, converting paragraphs to <P> tags and vice versa, removing HTML tags entirely, and so on. You can choose to have the results displayed in a new document window and to convert only the selection rather than the whole document. See "HTML Translation" later in this chapter for more information.

Remove Comments or Markup

This command removes all HTML comments or HTML tags, respectively, from the selection. Note that removing comments will not remove comment markers around client-side scripts like JavaScript, where they are required for proper functioning of the page on older browsers, but will remove the comment markers used by placeholders and indexes, making these items difficult to update in the future.

Comment, Uncomment

Commenting adds comment markers (<!-- -->) around the selected text so that it is ignored by the browser. (It also converts any previously existing comment markers in the selection range to use double square brackets [[ ]] in place of < >, and ~~ in place of --, to prevent older browsers from misinterpreting the comment.) Uncommenting removes all comment tags from the selection and converts any double-bracket comments back to real HTML comments.

Normalize Tag Case, Make Tags Upper or Lower Case

These commands convert all HTML tags in the document to the desired case: upper, lower, or normalized (which is either upper or lower depending on your HTML Markup preference settings).

Misc

The Misc submenu contains a motley assortment of commands that simply did not seem to fit anywhere else in the command hierarchy, including commands related to using BBEdit with other HTML editors.

Dreamweaver

Choose Dreamweaver to open the current HTML document in Macromedia Dreamweaver (or to return to Dreamweaver if you opened a page in BBEdit from there).

Document Size

This command displays a report about the document's size and the amount of time it will require to download at various connection speeds.

Index Document

This command generates a list of links to all the <A> (anchor) tags in the current document that have a NAME attribute, providing a clickable index of all these anchors. If you have used the <A> tag to mark your main topics (for example, all <H2> headers) this produces an instant topic-level index of the current document. The index is placed after the <BODY> tag, unless the insertion point is in an already existing index, in which case the old index is replaced with the new one. (Do not remove the comment markers around the index if you want to be able to update it in the future.) Index Document also adds <A name> tags to all heading tags that do not already have them.

Index Folder

This command works like Index Document but produces an index of the HTML files within a specific folder. You can choose from five different styles of indexes, including one that provides full information about every referenced file. The best way to see what each format of index looks like is to experiment for yourself.

Index Site

This command creates an index of all the HTML documents in your site, as with Index Folder.

GoLive, Home Page, or PageMill Cleaner

These commands clean up the often gnarly HTML code created by these WYSIWYG editing tools. This will make the file easier to edit, smaller, and often slightly quicker to load into a browser. The GoLive cleaner removes font tags with no semantic value—that is, tags which contain nothing at all, or just white space. The PageMill cleaner removes the "NATURALSIZEFLAG" attribute that PageMill puts in <IMG> tags, and turns every two consecutive line break tags into paragraph (<P>) tags.

Preview

The Preview commands allow you to view your creation in a browser. You can choose a browser from the Preview With submenu, or use Preview by itself to use the last chosen browser. You can also preview the page in all running browsers or in a text-only format. (On Mac OS X, browsers running in the Classic environment are labeled "(Classic)".)

The HTML Tools Palette

The main HTML Tools Palette is the place from which you will probably access the HTML Tools most frequently. You can invoke the HTML Tools palette at any time by selecting it from the Palettes submenu in the Window menu. BBEdit remembers which palettes you had open when you quit, so if you open the HTML Tools palette, it will remain open until you close it again, even on subsequent uses of BBEdit.

You can choose the buttons to be displayed on HTML Tools palette in the HTML Palette preference panel.

HTML Tools Palette Tips

A list of all the tools that are available on the HTML Tools palette appears below. In most cases, their behavior corresponds obviously with the tool descriptions in the previous section. In the few cases where there are significant differences, these are noted.

Many of the tools also work with drag and drop. Those that do are marked with "grip-strips"—two vertical slashes at the left side of the button. You can drag these tools into your document to have them take effect wherever you drop them.

Some palette buttons are actually pop-up menus. Clicking a pop-up menu button while holding down the Command key invokes that menu's last-selected menu option.

Try pressing the Option key and watch how the palette changes. By holding down Option as you click, you can force many buttons that normally display a settings dialog to use their previous settings instead. The Preview button previews your document in a new browser window when you Option-click.

HTML Tools Palette

Tool	Menu-Based Equivalent
New Document	File > New > HTML Document
Tag Maker	Markup > Tag Maker
Edit Tag	Markup > Edit Tag
Document Type	Markup > Document Type
Character Set	Markup > Character Set
CSS	Markup > CSS submenu
Body Properties	Markup > Head Elements > Body Properties
Head Elements	Markup > Head Elements submenu
Anchor	Markup > Inline Elements > Anchor
Image	Markup > Inline Elements > Image
Break	Markup > Inline Elements > Break
Font	Markup > Inline Elements > Font
Paragraph	Markup > Block Elements > Paragraphsub
Div	Markup > Block Elements > Div
Heading	Markup > Block Elements submenu
Dreamweaver	Markup > Misc > Dreamweaver
Block Elements	Markup > Block Elements submenu
Inline Elements	Markup > Inline Elements submenu
List	Markup > Lists > List, Markup > Lists submenu
Table	Markup > Tables > Table, Markup > Tables submenu

Tool	Menu-Based Equivalent
Forms	Markup > Forms submenu
Phrase Elements	Markup > Phrase Elements submenu
Font Style Elements	Markup > Font Style Elements submenu
Frames	Markup > Frames submenu
Check Syntax	Markup > Check > Document Syntax
Check Links	Markup > Check > Document Links
Update	Markup > Update > Document
Balance Tags	Markup > Check > Balance Tags
Check	Markup > Check submenu
Update	Markup > Update submenu
Includes	Markup > Includes submenu
Utilities	Markup > Utilities submenu
Misc	Markup > Misc submenu
Preview	Markup > Preview, Markup > Preview With submenu

Other Palettes

In addition to the main HTML Tools palette, BBEdit incorporates a number of other palettes that may be useful to HTML authors.

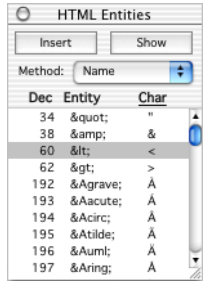
First, several of the pop-up menus on the HTML Tools palette can be used to open floating palettes for specific tools. At the bottom of the pop-up menus for CSS, Block Elements, Inline Elements, Table, Forms, Phrase Elements, Font Style Elements, and Utilities is a menu item that opens the specified menu as a palette. For example, choosing Inline Palette from the bottom of the Inline Elements pop-up menu opens a new palette containing a button for each of the items on that menu.

You probably will not need to open all these "subpalettes" at once, but they can be quite convenient to open temporarily when you are working on a particular type of element (form, table, and so on). In addition to being able to open them from the main HTML Tools palette, you can also access each palette from the Palettes submenu in the Window menu.

Two other palettes are also of particular interest to Web authors: the HTML Entities palette and the Web Safe Colors palette.

HTML Entities

In HTML, extended characters must be encoded as entities, since different computers define the extended ASCII characters differently. The HTML Entities floating window lists these entities.



Entities can be inserted by name ("©" is the copyright symbol, ©) or number ("&169;" for ©) by choosing the desired method from the small pop-up menu at the top of the HTML Entities palette. (We suggest inserting entities by name, since they are more readable, unless browser compatibility requires use of the decimal versions.)

Double-click an entity name to insert it into the active document, or click once to select the desired entity and then click Insert.

The list of entities presented in the HTML Entities palette is now sortable by decimal value, name (case-insensitive, so "&ecaute;" and "É" are grouped together), or character (sorted by the character position after all diacriticals have been stripped, so that all "a"s are grouped, and so on). Click on a column label to set the sort order accordingly. (The default is to sort by decimal value.)

Note Since Mac OS X offers a larger set of Unicode glyphs than Mac OS 9, BBEdit will always draw the Unicode character corresponding to an entity on Mac OS X. This means that you will see fewer undefined characters in the list.

Web Safe Colors

The Web Safe Colors palette displays the 216 colors that display properly in Web browsers on all computers running in 256-color mode. The colors are based on a 6 x 6 x 6 color cube that adds red, green, and blue in 20% increments.

Use a color from this palette for Web page backgrounds and text to reduce the chance that the incorrect color (possibly dithered) will be used instead of a pure color.

Note There are four layouts available: horizontal, vertical, and VisiBone and VisiBone 2. You can choose a layout in the HTML Colors preference panel.

Click a color swatch to insert the color's RGB value, in HTML format (that is, "#RRGGBB") at the insertion point. You can also drag a color swatch into a document window to place the color value.

The Web Safe Color palette is CSS-aware, and will insert color values in CSS format—that is, unquoted and minimized—when appropriate.

HTML Translation

The following options are available in the Translate tool, available in the Utilities submenu of the Markup menu.

Remove Tags

When converting HTML to TEXT, the Translate tool will remove all HTML tags and comments.

Paragraphs

When converting TEXT to HTML, the Translate tool finds paragraphs in the same way the Paragraph tool does, and then adds opening and closing paragraph tags around them.

When converting HTML to TEXT, it makes sure there are line breaks around each paragraph in the resulting text.

HTML Entities

When converting TEXT to HTML, the Translate tool converts characters from their positions in the standard Macintosh character set into HTML entities, using either names or the code (in decimal or hexadecimal). You can specify whether the tool should ignore < and >. This is useful when translating text already marked up as HTML. You can also specify that all Unicode text should be converted to entities.

Templates

In addition to providing many facilities for creation and markup of individual documents, the HTML Tools also incorporate a Template facility, which can be used to quickly create (or revise) a set of HTML documents that share a common format, structure, or content. You can design a skeleton document, make a template from it, and then use that template over and over again to produce new pages ready to fill with content, or to insert into existing text documents to provide an uniform structure or appearance. Templates may also employ placeholders and include files (see Appendix C), adding even more power to this useful function.

Template Setup

A folder named HTML Templates, which contains some sample templates, is provided as part of the standard BBEdit installation. We suggest, in most cases, that you continue to use this as your templates folder. If you would prefer, however, you can set up your own template folder wherever you like. (See “Look for Templates and Include Files In” on page 168.) If you plan to maintain multiple sets of templates for different projects, you may find this option very useful.

Using a Template

A template is a simple text file that contains boilerplate text or HTML content that will form the foundation for the document you are creating. Template files must have the file name suffix ".tmpl" in order to be recognized.

When creating a template file, you can convert or reuse an existing document, or you can write one from scratch. Simply rename the file by adding the suffix ".tmpl" to it, and then move or copy it into your active HTML Templates folder.

Templates are always invoked using the New Document tool. Even if you want to impose a template on an existing document, you still do it through New Document. The Template option appears as a pop-up menu at the bottom left of the New Document dialog.

All template files in the Templates folder appear in this menu. (The "Default" setting is not a template per se, but rather a directive to create a blank HTML document framework containing whatever Title, Base, Meta, Link, SGML Prologue (and so on) values you specify. It is always available, regardless of the contents in your Templates folder.) Once you have specified the appropriate settings and chosen Create, BBEdit will open an new Untitled window containing the full text of the selected template file.

If you invoke the Document tool while working on an existing document, you will see a Create New Window checkbox next to the Template menu. Normally this option will be on, but if you deactivate it, the specified template (and other applicable Document values) will be inserted into the currently open document, so as to enclose the document's contents within the template's <BODY> tags. The contents of the document are inserted at the template's #BODYTEXT# placeholder, so each template to be used in this manner must contain this placeholder.

Regardless of whether you use a template to create a new document or to impose HTML markup on an existing document, the template file itself is never changed. Rather, its contents are simply copied into the document that the template has been used on.

Note Templates can make full use of placeholders and include files, which are fully documented in Appendix C.

Custom Markup

Neither the Custom Markup tool (supplied in versions of BBEdit prior to 5.0) nor any plug-ins created with this tool will work in BBEdit 7.0. The types of functions performed by the Custom Markup tool may be accomplished more effectively with OSA (AppleScript or Frontier) scripts, BBEdit's Glossary command, or via some combination of these.

CHAPTER

12 Using the Glossary

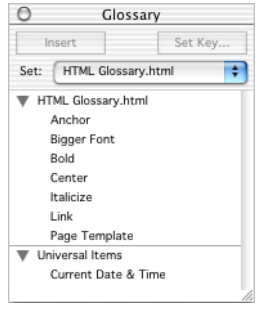
This chapter describes BBEdit's powerful Glossary command. The Glossary provides an easy way to store and access frequently used text of any sort, whether sections of program code, HTML markup, or just about anything else. The Glossary's language-sensitive set selection and its ability to perform keyword substitution, combined with an option to run OSA scripts and insert their results, further extends its flexibility and usefulness.

In this chapter

The Glossary Command 223
Language Sensitivity of the Glossary 224
Manually Sorting the Glossary 224
Inserting Glossary Items 224
Assigning Key Equivalents to Glossary Items 225
Glossary Substitutions 226
Using OSA Scripts with the Glossary 227

The Glossary Command

Choosing the Glossary command from the Palettes submenu of the Window menu opens the Glossary floating window, shown below. This window lists the contents of the active glossary set, plus the contents of the Universal Items glossary set and any glossary items contained directly within the Glossary folder (that is, which do not belong to a set). Names that are too long to fit within the width of the window are truncated with ellipses (…).



new in 7.0 "Hovering" the mouse over such a truncated name displays a tool tip showing the full name. If you hold down the Option key, the tool tip will appear instantly, with no hovering delay. Names that fit entirely within the window without truncation do not display a tool tip.

To create a glossary item, type or paste the desired text, or text and keywords, into a BBEdit document window and then save the text into an appropriate place within the Glossary folder.

You can create multiple levels of subfolders inside the Glossary folder, to better organize different types of content. The first level of such subfolders appear in the Set pop-up menu of the Glossary window, allowing you to reveal only the group of glossary items you wish to work with at a given time. (Any glossary items that are not placed in a subfolder are always shown in the Glossary window, as are the contents of the Universal Items set.)

Language Sensitivity of the Glossary

If you have selected the Glossary Is Language Sensitive option in the Glossary preference panel, BBEdit will select a glossary set to use with the current document according to the following rules:

- If there is a glossary set whose name ends in the same suffix as the document, that set will be selected.
- If there is a glossary set with the same language mapping as the document (as determined from the mappings in the Languages preference panel), that set will be selected.
- If there are multiple glossary sets with the same language mapping (for example, "HTML Glossary.html" and "HTML Glossary.shtml"), the glossary set that appears first in the Set pop-up menu will be selected. (You can control the order in which glossary sets appear as described in the next section, "Manually Sorting the Glossary.")

These selection rules are intended to provide maximum flexibility while automatically doing the right thing as often as possible.

Manually Sorting the Glossary

By default, the Set pop-up menu displays glossary sets in alphabetical order. However, you can force them to appear in any desired order by including any two characters followed by a right parenthesis at the beginning of their name: for example "00)Web template" would sort before "01)HTML Template". The first three characters of such names are not displayed in the menu. You can also insert a divider by including an empty folder whose name ends with the string "`-***`". (You can use anything you want for the rest of the name, to make it appear where you want it in the menu.) These conventions are the same as those used by the utilities FinderPop and OtherMenu.

Inserting Glossary Items

Double-clicking an item's name in the Glossary window inserts its contents at the insertion point or in place of the current selection. Alternatively, you can click the item's name once to select it and then click the Insert button, or drag the item directly to the desired location in the document window.

Note If you hold down the Option key, the Insert button changes to Edit, allowing you to open the file corresponding to the selected item so you can edit it; you can also do the same thing by Option-double-clicking the item directly.

new in 7.0 The Insert Glossary Entry command in the Edit menu brings up a dialog window in which you can select a glossary item and insert it at the insertion point (or in place of the current selection) with the Insert button. You can move quickly to an item in this window by typing its first few letters from the keyboard, or by using Tab and Shift-Tab to navigate forward and backward through the list.

new in 7.0 Another way to insert a glossary item is with the Auto-Complete Glossary command in the Edit menu. If there is a current selection, BBEdit will look for and insert a glossary item whose name begins with the selected text. (If there is more than one such item, BBEdit will display the Insert Glossary Entry dialog to allow you to choose one; if there are no matching glossary items, it will beep to signal an error.) If no text is currently selected, BBEdit will scan backward from the insertion point to the nearest non-alphanumeric character and match that text in the same manner. This allows you to quickly insert a glossary item "on the fly" by typing the first few letters of its name and choosing Auto-Complete Glossary from the menu.

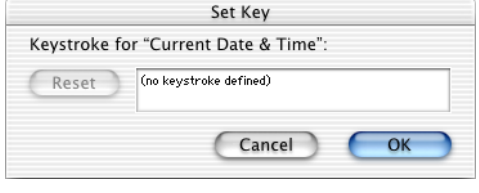
IMPORTANT For easier access, you may want to assign key equivalents to these commands by using the Set Menu Keys command (in the Edit menu on Mac OS 9, or in the BBEdit (Application) menu on Mac OS X).

Assigning Key Equivalents to Glossary Items

The Set Key button in the Glossary window lets you assign key equivalents for easy access to frequently used glossary items. To assign a key to a glossary item:

1 **Select the item in the Glossary window.**

2 **Click the Set Key button to display the Set Key dialog.**



3 **Type the key equivalent.**

You can use any combination of the Command, Shift, Option, and Control keys in the key equivalent, provided that it must use at least the Command or Control key to be valid. You can also use function keys, with or without additional modifiers.

4 **Click OK.**

Note If you try to assign a key equivalent that is already used elsewhere, BBEdit warns you that there is a conflict and asks you whether you want to reassign that key equivalent to the new item.

To remove a key equivalent from a glossary item:

1 **Select the item in the Glossary window.**

2 **Click the Set Key button to display the Set Key dialog.**

3 **Click Reset, then OK.**

Glossary Substitutions

When you insert a glossary item containing a placeholder into an editing window, BBEdit replaces the placeholder with appropriate substitution text. This is similar to the operation of BBEdit's HTML Templates and Update features. The following table shows the placeholders you can use in a glossary item:

Placeholder	Replaced by…
#BASENAME#	The name of the file stripped of its rightmost period-delimited portion. For example, if the file is named "test.html", the base name is "test", while if the file is named "test.foo.html", the base name is "test.foo".
#CLIPBOARD#	Contents of the current clipboard
#DATE#	Current date, formatted according to your Date & Time control panel preferences
#FILE#	File name of the document into which the item is inserted
#FILE_EXTENSION#	The filename extension for the file (determined as the rightmost period-delimited portion of the filename, without the period). For example, whether the file is named "test.html" or "test.foo.html", the filename extension is "html".
#FUNCTION#	If the item is being inserted into a source file, the name of the current function
#INDENT#	When used in a glossary item with multiple lines, causes every line after the first to be indented to the same whitespace level as the line in which the item was inserted (see the supplied WML glossary for examples)
#INLINE#	Strips all trailing vertical white space from the item before insertion (see also the Glossary preference panel)
#INSERTION#	Marks the place where BBEdit will place the insertion point after inserting the item; if multiple #INSERTION# placeholders are used, the second and subsequent occurrences are replaced with "#•#", which can be used with Go to Next/Previous Placeholder in the Search menu
#NAME#	User name defined in the Sharing Setup or File Sharing control panel
#SCRIPT filename#	Result of running the specified OSA script
#SELECT#	Selected text

Placeholder	Replaced by…
#SELSTART# and #SELEND#	Mark a range within the inserted material to be selected after the insertion
#TIME#	Current time, formatted according to your Date & Time control panel preferences
#UUID#	A 128-bit UUID (universally unique identifier), formed by combining a value unique to the computer on which it was generated (usually the Ethernet hardware address) with a value representing the number of 100-nanosecond intervals since October 15, 1582

Placeholders are not case-sensitive. If you want to include a literal placeholder in a glossary item, escape the first # with a backslash, as in \#DATE#.

Suppose you have defined the following glossary item:

```
typedef struct #select#
{
#insertion#
} #select#, *#select#Ptr, **#select#Handle;
```

If the selected text in your editing window is "MyStruct" and you insert this glossary item, BBEdit will insert the following in the editing window:

```
typedef struct MyStruct
{
|
} MyStruct, * MyStruct Ptr, ** MyStruct Handle;
```

(where the vertical bar marks the point at which the blinking insertion point will be placed).

Using OSA Scripts with the Glossary

The placeholder #script filename# provides a powerful means to insert variable or conditional content by allowing access to any compiled OSA script from within a glossary item.

The script itself can either be located in the same folder as the glossary item that invokes it (in which case you need only specify its name, such as "MyDateScript") or you can supply a full pathname to a script on any mounted volume (such as "Hard Drive:My Project:Scripts:MyDateScript"). An instance of a placeholder referencing the latter would be

```
#script Hard Drive:My Project:Scripts:MyDateScript#
```

The script must return a text string (or a value that can be coerced to a string). This result string can itself contain additional glossary placeholders, which will be interpreted before the item is inserted in the current document.

WARNING Note that this makes it possible for one script to invoke another. Take care not to create a script execution loop, which would hang your system!

CHAPTER

13 Scripting BBEdit

BBEdit offers access to nearly all of its features and commands via any OSA-compliant scripting language, such as AppleScript or UserLand's Frontier. This chapter provides a brief overview of AppleScript, discusses BBEdit's scripting model, and explains how you can use scripts within BBEdit.

An excellent way to learn how to script BBEdit is to look at the scripts others have written for it, or to turn on recording in your script editor while you perform actions in BBEdit. A number of example scripts are included in the standard distribution package. The BBEdit-Talk mailing list is also a good resource for learning more about scripting. To subscribe to this list, please visit the support section of our web site.

```
http://www.barebones.com/support/lists.html
```

IMPORTANT Beginning with version 6.0, many facets of BBEdit's scripting support changed substantially. Regardless of whether you are new to scripting BBEdit or are familiar with scripting previous versions, we strongly recommend that you carefully review the sections "BBEdit and AppleScript" and "Working with Scripts" in this chapter.

In this chapter

AppleScript Overview **229**
About Macintosh Scripting – 230
Scriptable Applications and Apple Events – 230
Recordable Applications – 231 • *Saving Scripts* – 231
Using Scripts with Applications – 232 • *Scripting Resources* – 232
BBEdit and AppleScript **234**
Recording Scripts for BBEdit – 234
Reading an AppleScript Dictionary – 236 • *Sample Scripts* – 240
AppleScript Pitfalls – 240
Moving Scripts from Pre-6.0 Versions of BBEdit – 241
Working with Scripts **247**
Scripts Menu – 247 • *Scripts Window* – 248
Organizing Scripts – 248 • *Attaching Scripts to Menu Items* – 248

AppleScript Overview

If you are familiar with AppleScript, you should have little difficulty scripting BBEdit. It has a robust and highly flexible object model. If you do not know much about scripting, though, read on for an introduction to the necessary concepts.

About Macintosh Scripting

In System 7 Pro, Apple introduced the Open Scripting Architecture (OSA), and with it AppleScript. OSA and AppleScript became a standard part of the Macintosh experience, and both have been with us ever since.

Note AppleScript is by far the most popular OSA language, but there are others, including UserLand Frontier and a relatively new JavaScript implementation. Most OSA languages are capable of accomplishing more or less similar things, although the actual commands to do so are usually very different from one language to the next. In this chapter, we will focus on AppleScript, since it is the scripting language that comes with the Mac OS. However, BBEdit can be scripted by any OSA language, and we will use "OSA script" and "AppleScript" interchangeably in this chapter just to remind you of that.

Unlike macro utilities such as QuicKeys or Keyquencer, OSA scripts do not (with occasional exceptions) manipulate an application's user interface. In other words, an OSA script does not operate by pretending it is a user, pulling down menus, clicking with the mouse, and typing on the keyboard. It is technically possible for an OSA script to do so, but this is not the primary use for scripts. OSA scripts talk directly to a program's internals, bypassing its user interface and allowing scripts to interact directly with its data or facilities. If you wanted to insert some text into a document, emulating a user typing into the application's window is just about the least efficient way of accomplishing this imaginable; with AppleScript, you would just tell the application to insert the text directly. If you wanted the application to save the frontmost document, you would not mime choosing Save from the File menu, but rather just tell the application to save document 1.

Scriptable Applications and Apple Events

Since OSA scripts must have direct access to an application's internal data structures, any application that will be used in an OSA script must be designed to allow this access. We say such applications are *scriptable*. BBEdit is scriptable, as are many, many other programs. However, it is important to note that not *every* application is scriptable, and OSA scripts are not the best solution for automating applications that are not.

What goes on in an application that is scriptable? The foundation of OSA scripting is something called the *Apple Event*. Macintosh applications are designed around an event loop; they go around in circles waiting for you, the esteemed user, to do something (choose a menu command, press some keys, and so on). These actions are passed to the application by the operating system in the form of an *event*. The application decodes the event to figure out what you did, and then performs an appropriate operation. After an event has been handled, the application goes back to waiting for another one. (At this point, the Mac OS may decide to give some time to another application on your computer.)

Apple Events are special events that applications send to each other, enabling a feature called *inter-application communication* (IAC). (It's a mouthful, but it just means applications can talk to each other.) Apple Events are also the way OSA scripts tell applications what to do, and which data to retrieve. So to be scriptable, an application must first support Apple Events.

Apple Events in their naked form are raw and cryptic things—bits of hieroglyphics only a programmer could love. So a scriptable application also has a *scripting dictionary*. The scripting dictionary tells any application that lets you write OSA scripts (like the Script Editor that comes with the Mac OS) the English-like equivalent for each Apple Event and each event's parameters.

It is important to note that because Apple Events were originally designed to allow applications to communicate with each other, OSA scripts automatically inherit the ability to talk to more than one application. It is common in the publishing industry, for instance, to write scripts that obtain product information from a FileMaker Pro database and insert it into a Quark XPress file. This integration is one of the Macintosh's primary strengths.

You use AppleScript's *tell* verb to indicate which application you are talking to. If you are only sending one command, you can write it on one line, like this:

```
tell application "BBEdit 7.0" to count windows
```

If you are sending several commands to the same application, it is more convenient to write it this way:

```
tell application "BBEdit 7.0"
    count windows
    repeat with x from 1 to the result
        save window x
    end repeat
end tell
```

Apple's Script Editor automatically indents the lines inside the *tell* block for you so you can more easily follow the organization of the script.

Recordable Applications

Once an application accepts Apple Events, it actually makes a good deal of sense for an application to be designed in two parts: the user interface that you see, and the "engine" that does all the work. (An application designed this way is sometimes said to be *factored*.) The user interface then communicates with the engine via Apple Events.

The design of the Apple Event system makes it possible to "record" events into a script. This feature not only lets you automate frequently performed tasks with little hassle, it also can be an enormous aid in writing larger and more complicated scripts, because the application tells you what events and objects to use for the kind of task you record.

Because of the important recording functionality they enable, applications that have been factored and use Apple Events to let the two halves communicate are said to be *recordable*. It is important to note that not all scriptable applications are recordable.

Saving Scripts

Any OSA script can be saved in what's called a *compiled script file*. A compiled script file contains the actual Apple Events; by generating these events when you save the file, the OSA language does not have to convert your English-like commands into events each time you run the script, which means it loads faster. When double-clicked in the Finder, a compiled script file automatically opens in the Script Editor, where it can be run. A

script can also be saved as a stand-alone application, or *applet*, in which case double-clicking the script's Finder icon automatically runs the script. Both types of files can be saved with or without the English-like *source code;* if you save it without the source code, other users you give the script to will not be able to make any changes to it (of course, you should also keep a copy of the script *with* the source for yourself).

Using Scripts with Applications

Although you can place a script applet in your Apple menu, or on your Finder desktop, and use it any time you need it, many applications (including BBEdit) provide a special menu that lets you launch compiled scripts intended specifically for use with that one application. Since you do not have to save them as applets, they take up less disk space and launch more quickly. They also show up only in the application you use them with, rather than cluttering your Apple menu.

Some applications go even further, allowing you to define scripts to be run when certain things happen in the program. For example, an application might let you define a script to be executed when the user chooses *any* menu item. The script might then perform some pre-processing, and then exit by telling the application whether to continue with the menu command or to cancel it. As a simple example, a script might check to see what printer is selected when the user chooses the Print command. If it is the expensive color dye-sublimation printer, on which printing a page costs several dollars, the script could remind the user of that fact and confirm their intention (through an alert) before continuing with the print operation.

An application that supports such a feature (or any method of integrating user-written scripts seamlessly into its user interface) is said to be *attachable,* because the scripts become "attached" to the features of the program. (BBEdit is now attachable; more details about using this feature are provided later in this chapter.)

Scripting Resources

Covering all the details you might need to write your own AppleScripts is not something we can reasonably do in this manual. AppleScript, despite its deceptively simple English-like syntax, is a sophisticated object-oriented language with many subtleties. For this reason, we suggest you consult supplemental documentation and resources if you are a beginning scripter.

A good place to start is with someone else's script: find a script that does *almost* what you want it to and repurpose it. Even if you cannot find a script that does anything close to what you want, reading others' scripts is a good way to learn how AppleScript "thinks" and how BBEdit's particular AppleScript implementation behaves.

In addition to the basic AppleScript documentation included with a standard Mac OS installation. You may find the following resources useful in your quest to understand scripting:

Books

Danny Goodman's AppleScript Handbook, Second Edition, Danny Goodman. ToExcel, 2000. ISBN: 0-96655-141-9

AppleScript in a NutShell, Bruce W. Perry. O'Reilly and Associates, 2001. ISBN: 1-56592-841-5.

Mailing Lists

AppleScript Users

`http://www.lists.apple.com/applescript-users.html`
The official list for AppleScript users run by Apple Computer.

BBEdit-Talk, BBEdit-Scripting

`http://www.barebones.com/support/lists.html`
The discussion lists for BBEdit often cover BBEdit-specific scripting topics and are a good place to ask questions about BBEdit's AppleScript implementation.

Mac Scripting

`http://www.its.unimelb.edu.au/hma/pub/macscrpt/`
Unofficial list covers AppleScript and other Macintosh scripting languages, with occasional forays into peripheral topics.

Web Sites

AppleScript at Apple Computer

`http://www.apple.com/applescript/`
This is the starting point for AppleScript from the people who invented it. Includes a tutorial and a good amount of technical information.

The AppleScript Sourcebook

`http://www.AppleScriptSourcebook.com/`
An extensive collection of links and articles about AppleScript.

AppleScript Primer

`http://www.maccentral.com/columns/briggs.shtml`
MacCentral columnist Bill Briggs offers an ongoing series of lessons for beginning scripters. Quite a range of topics covered, increasing in difficulty as time goes on. Note that the oldest columns are on the bottom.

MacScripter.Net

`http://macscripter.net/`
and
`http://osaxen.com/`
A good selection of AppleScript-related news and topics, including "MacScripter's Magazine" (a stand-alone multimedia tutorial for AS beginners), and a very comprehensive list of scripting additions on its related site.

ScriptWeb

`http://www.scriptweb.com/`
This site covers all scripting languages, not just AppleScript. Also, it has an extensive directory of scripting additions.

Software

FaceSpan

`http://www.facespan.com/`
FaceSpan lets you create real Macintosh applications using AppleScript. It includes a visual development environment that lets you create your user interface, to which you then attach scripts.

PreFab Player

`http://www.prefab.com/player.html`

This handy utility for Mac OS 9 allows you complete control over the Macintosh user interface, allowing you to script even unscriptable applications to a degree.

Script Debugger

`http://www.latenightsw.com/`

Despite the name, it is more than a debugger; it is actually an enhanced replacement for Apple's Script Editor, featuring variable monitoring, step/trace debugging, an object browser for an application's objects, and much more.

Scripter

`http://www.mainevent.com/scripter.html`

The original enhanced script editor for the Macintosh, Scripter also features extensive debugging capabilities and also comes with ScriptBase, a database that lets you easily store large data items persistently.

BBEdit and AppleScript

BBEdit has been scriptable for years, though we have continually worked to improve its level of scripting refinement. BBEdit has long provided access to scripts in its menu bar and, more recently, through a floating Scripts palette. In BBEdit 5.0, many BBEdit plug-ins became scriptable, as did the HTML authoring tools.

BBEdit now takes a further step forward, by being both attachable *and* recordable. (See the later section "Attaching Scripts to Menu Items" for complete details on BBEdit's attachability.)

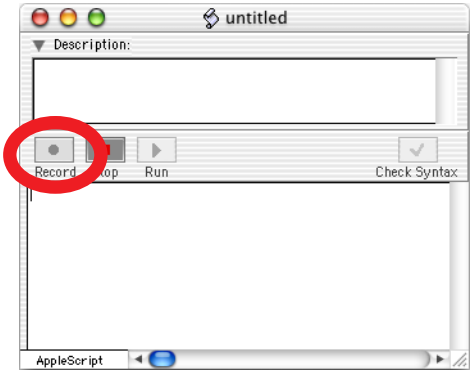
IMPORTANT

Recording Scripts for BBEdit

Any language is easier to read than to write, easier to understand than to speak. AppleScript is no different. That's because, even though all the commands it uses are English words arranged in ways that more or less make grammatical sense, you still have to know (or find out from the application's dictionary) exactly which words to use, and what order they should go in. But it is easy to get started making scripts by recording them.

First, launch both BBEdit and the Script Editor. (If you do not know where your copy of the Script Editor is, use Find File or Sherlock to locate it. If you do not have it—maybe you deleted it because you thought you would never use it—just reinstall it from your Macintosh system software CD.)

When you launch the Script Editor, a new, blank script window appears. Click the Record button, circled in the illustration below.



Now switch to BBEdit and perform your task. Remember that the Script Editor is recording *everything* you do in every recordable application you are running, not just BBEdit. If you do something in the Finder, for instance, that will get recorded too. Since almost everything you do is recorded, remember that if you make an error, and then Undo it, your recorded script will faithfully make the same mistake and undo it when you run it later. It will be possible to fix minor errors later, but things always go more smoothly if you do not make any mistakes, so take your time and try to do it right the first time.

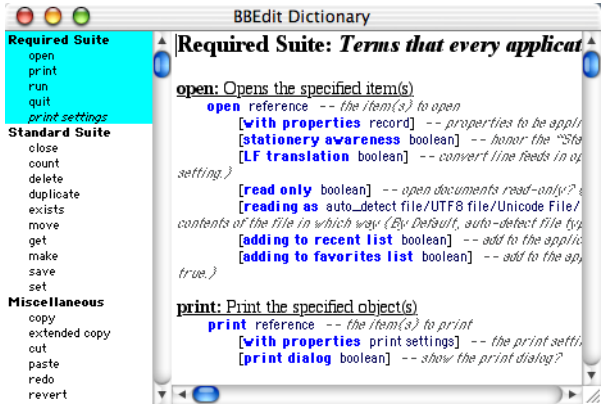
Now switch back to the Script Editor and click the Stop button. After a brief pause, your script is compiled and ready for use. Try clicking the Run button to see it work. (It might not work correctly. If you recorded a search and replace operation changing every “cat” to “dog”, you already changed the document while recording the script, and of course the script will not do anything when you run it.)

Next, let’s save the script in the BBEdit Scripts folder so that it shows up in BBEdit’s script menu. Choose Save As from the File menu, and then use the Script Editor’s Save dialog to put the script in your BBEdit Scripts folder. Now try selecting it from the script menu in BBEdit.

Reading an AppleScript Dictionary

To display an application's AppleScript dictionary, you can simply drag that application onto the Script Editor icon, or use the Script Editor's Open Dictionary command. As we noted earlier, all scriptable applications include a dictionary that tells AppleScript how to convert English-like commands into the Apple Events actually expected by the application. The Script Editor uses this same information to display a sort of "vocabulary guide" that helps you write your scripts.

We will naturally use BBEdit's dictionary, shown below, to illustrate how to read a dictionary.



You may want to make the window bigger if you have room on your screen. It is kind of small by default.

Down the left side is a list of every event and object supported by the application. An event is a verb—it tells the application what to do. A class is a noun: a piece of data, or a structured collection of data, inside the program. In BBEdit, for instance, classes are things like files, windows, the clipboard, browsers, and so on.

Suites

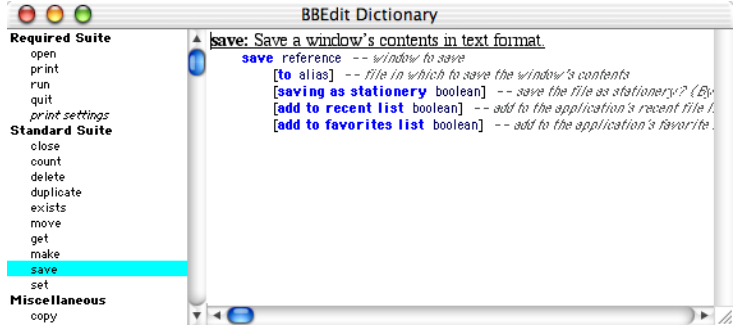
The first thing you will notice is that the events and classes are divided into *suites*. A suite is just a collection of related events and classes. Apple, for instance, has decreed that all applications should support particular events, which together are called the Required Suite. Another Apple-defined suite is the Standard Suite: if an application has certain common functions, they should use these standard terms, so that scripters do not need to learn a new term for each application they work with. After that, it is a free-for-all—each developer is free to organize their events and classes however they think best.

In addition to the Required and Standard suites, BBEdit has a Miscellaneous suite, a BBEdit Suite, a Text suite, and an HTML Scripting suite. If you have the appropriate software installed, you will also see the MacPerl Scripting suite, and the Projector Scripting suite. Additionally, if you have any scriptable plug-ins installed (as many of the supplied ones are), you will see additional suite entries for each such plug-in.

Within each suite, events—verbs—are displayed in normal text, while classes—nouns—are italicized. Most commands sent to BBEdit will start with one of the verbs. (In some cases, *get* might be implied.)

Events

Let's look more closely at one of the events—*Save* is a good one to start with. It is shown below.



The right side of the window shows the syntax of the selected event, as well as a brief description of its function. The boldface words are keywords; they must be included exactly as shown or the script will not compile. The normal text tells you what kind of information goes after each keyword. For example, after *save* you must give a reference; the italicized comment next to that line indicates that it is a reference to the window to be saved. In other words, some window object, which in BBEdit would be *window 1* for the frontmost window, or *window "Text File"* if you want to specify a window by name. (we will show you how to figure all that out in a moment—you have to look at the window class's dictionary entry.)

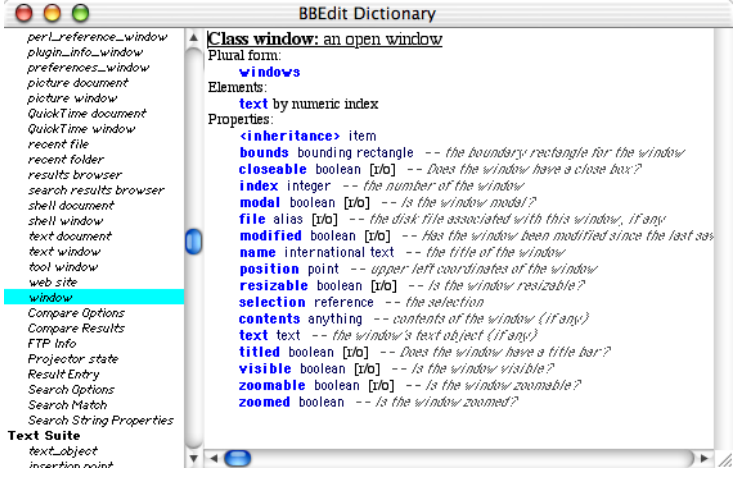
Anything in square brackets is optional. Most of the rest of the *save* event is optional, in fact. The basic event just saves the frontmost window to the same file from which it was opened. However, you can also optionally include the word *to* followed by a file reference. (You specify a file simply by using the word *file* followed by the path name of the file, as in *file "Macintosh HD:Desktop Folder:My file".)* If you specify a file to save the window to, the text will be saved into that file instead of the file it came from—like using Save As instead of Save.

The last three optional parts of the *save* event are denoted as boolean. That means they take either a true or a false value. In AppleScript, there are a couple of different ways to specify boolean values. You can write *saving as stationery true* to tell BBEdit to save the file as a stationery document. Or you can write *with saving as stationery*. You will notice that the last two parameters default to true if you do not specify them as false. To do that, you would use *add to recent list false* or *without add to recent list*. Whichever way you write it, you will notice that when you compile the script, AppleScript rewrites it using "with" or "without". Since that is the syntax AppleScript seems to like best, that is probably the one you should get used to thinking in.

Let's take a look at another one: the prosaic *get*. Select *get* from BBEdit's dictionary listing and take a quick look at its class definition.You use *get* to retrieve information from an application. You must specify a reference to the object you want to retrieve, and you can specify a *coercion*—a condition that tells AppleScript to treat one type of data as if it were another—by adding the *as* clause. However, after that is the *Result:* line, which we have not seen before. This line tells you what type of value the command returns. (This value is placed in the AppleScript system variable called *the result.) Get* can retrieve any kind of object, so it can return anything, as indicated here. Other events might return a specific type of result, or none at all. *(Save* did not have a *Result:* line in its dictionary entry, which means it does not return a result.)

Classes and the Class Hierarchy

Let's look now at a typical class definition: *window* will do nicely. It is in the BBEdit Suite, toward the bottom.


BBEdit Dictionary
perl_reference_window
plugin_info_window
preferences_window
picture document
picture window
QuickTime document
QuickTime window
recent file
recent folder
results browser
search results browser
shell document
shell window
text document
text window
tool window
web site
window
Compare Options
Compare Results
FTP Info
Projector state
Result Entry
Search Options
Search Match
Search String Properties
Text Suite
text_object
Class window: an open window
Plural form:
windows
Elements:
text by numeric index
Properties:
<inheritance> item
bounds bounding rectangle -- the boundary rectangle for the window
closeable boolean [r/o] -- Does the window have a close box?
index integer -- the number of the window
modal boolean [r/o] -- Is the window modal?
file alias [r/o] -- the disk file associated with this window, if any
modified boolean [r/o] -- Has the window been modified since the last sav
name international text -- the title of the window
position point -- upper left coordinates of the window
resizable boolean [r/o] -- Is the window resizable?
selection reference -- the selection
contents anything -- contents of the window (if any)
text text -- the window's text object (if any)
titled boolean [r/o] -- Does the window have a title bar?
visible boolean [r/o] -- Is the window visible?
zoomable boolean [r/o] -- Is the window zoomable?
zoomed boolean -- Is the window zoomed?

All windows in BBEdit belong to this class. A class defines a particular kind of object; a particular example of an object belonging to the class is said to be an instance of that class, or just an object of that class. So here we are looking at the class itself; each individual window object has all these properties.

After a tag line that tells you about the class ("an open window") comes the plural form. AppleScript lets you refer to windows either singly or as a group, so it needs to know what the plural of every term is. For example, try this little script:

```
tell application "BBEdit 7.0" to count windows
```

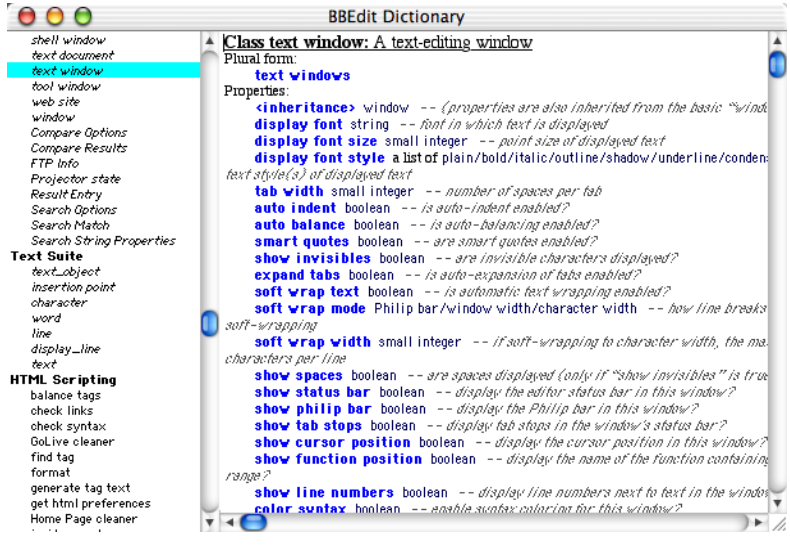
The result of this script is the total number of window objects currently displayed by BBEdit.

After the plural form comes a list of properties. Some objects do not have properties—for example, a string—but many applications do. An object's properties are merely a collection of data that describes that particular object. For example, as you look down the list of window properties, you will see that every window has a name, every window has a position, every window has bounds (the area of the screen it covers), and so on.

The first item on the list, though, is *<inheritance> item*. This tells you that a window is a kind of item, and that it therefore has all the properties of an item. Take a quick look at *item's* class definition, shown below.

You will see three properties: *properties*, *ID*, and *container*. The first entry *properties* is a record containing all the object's properties. In other words, because a window is an item, it has, in addition to all its listed properties, another property which returns all the other properties as a record—a single piece of data that can be stored in a variable. Every class in BBEdit is part of a hierarchy with the *item* class at the top, so every object in BBEdit "inherits" the *properties* property. This catch-all property can be handy for making exact duplicates of objects, among other uses.

You may realize that BBEdit has several kinds of windows; you can see their classes listed in the dictionary: clipboard window, differences window, disk browser window, file group window, text window, tool window, and the like. Let's look at *text window:*


BBEdit Dictionary
shell window
text document
text window
tool window
web site
window
Compare Options
Compare Results
FTP Info
Projector state
Result Entry
Search Options
Search Match
Search String Properties
Text Suite
text_object
insertion point
character
word
line
display_line
text
HTML Scripting
balance tags
check links
check syntax
GoLive cleaner
find tag
format
generate tag text
get html preferences
Home Page cleaner
Class text window: A text-editing window
Plural form:
text windows
Properties:
<inheritance> window -- (properties are also inherited from the basic "windo
display font string -- font in which text is displayed
display font size small integer -- point size of displayed text
display font style a list of plain/bold/italic/outline/shadow/underline/conden
text style(s) of displayed text
tab width small integer -- number of spaces per tab
auto indent boolean -- is auto-indent enabled?
auto balance boolean -- is auto-balancing enabled?
smart quotes boolean -- are smart quotes enabled?
show invisibles boolean -- are invisible characters displayed?
expand tabs boolean -- is auto-expansion of tabs enabled?
soft wrap text boolean -- is automatic text wrapping enabled?
soft wrap mode Philip bar/window width/character width -- how line breaks
soft-wrapping
soft wrap width small integer -- if soft-wrapping to character width, the ma
characters per line
show spaces boolean -- are spaces displayed (only if "show invisibles" is tru
show status bar boolean -- display the editor status bar in this window?
show philip bar boolean -- display the Philip bar in this window?
show tab stops boolean -- display tab stops in the window's status bar?
show cursor position boolean -- display the cursor position in this window?
show function position boolean -- display the name of the function containin
range?
show line numbers boolean -- display line numbers next to text in the windo
color syntax boolean -- enable syntax coloring for this window?

You can see that a text window inherits all the properties of the *window* class. And, since the *window* class inherits all the properties of the *item* class, this means that the *text window* class also has the *properties* property defined by the *item* class.

To make explicit what you might have already gathered, classes in AppleScript form a hierarchy. That is, classes can be based on other classes. Such a class is called a *subclass,* and the class on which a subclass is based is referred to as its *parent class.* (In AppleScript, classes can only have one parent. Multiple inheritance is a feature found in more complex languages.)

The idea of a class hierarchy makes it easier for us to add new features to BBEdit, since when we want to create a new kind of window, half the work is already done. However, when scripting, you may need to flip back and forth between two or more class definitions to find all the properties of the object you are working with. (This is, technically speaking, a limitation of Apple's Script Editor. There is no reason the inherited properties could not automatically be included in a subclass listing by a smarter editor, for example, Script Debugger, which does this.)

Now that we have the class hierarchy under control, let's look at the properties themselves more closely. we will stick with the *text window* class at this point.

Properties of an object are referred to using the preposition *of.* For example, the following line of script returns the font of the frontmost text editing window.

```
tell application "BBEdit 7.0" to get display font of
text window 1
```

Note You can in fact just write *get display font of window 1*. AppleScript will figure out that window 1 is more specifically a text window, and therefore has a *display font* property, even though the generic *window* class does not have any such property. All the properties of the object are available even if you did not use its specific class name.

You can set the properties using the *set* event, like so:

```
tell application "BBEdit 7.0" to set display font of text
window 1 to "Geneva"
```

Let's go back to the *window* class for a moment. Most of the properties of this class are marked with the abbreviation *[r/o].* That stands for Read-Only. In other words, you can only *get* these properties, not *set* them.

Sample Scripts

BBEdit includes a selection of sample scripts (in the BBEdit Documentation folder), all of which contain descriptions of their own operation. To learn more about a sample script, just open it in your preferred script editor. You can also check our web site for more sample scripts.

AppleScript Pitfalls

Here are some things to watch out for when scripting BBEdit with AppleScript.

The Escape Issue

AppleScript uses the backslash character as an escape character. You can use \r to indicate a carriage return or \t to indicate a tab character. More importantly, you can use \" or \' to include a quote mark or apostrophe in a string that is delimited by quotes or apostrophes. If you want to specify a real backslash, you must write \\.

That's not all that confusing until you start writing AppleScripts that call on BBEdit's powerful grep searching capability. BBEdit *also* uses the backslash as an escape character. If you want to search for an actual backslash in a document, you have to tell BBEdit to search for \\. However, if you do that in AppleScript, you must keep in mind that AppleScript will first interpret the backslashes before passing them to BBEdit. To pass one backslash to BBEdit from AppleScript, you must write two in AppleScript.

So to tell BBEdit to search for a single literal backslash from an AppleScript, you must write no fewer than *four* backslashes in the script. Each pair of backslashes is interpreted as a single backslash by AppleScript, which then passes two backslashes to BBEdit. And BBEdit interprets those two backslashes as a single one for search purposes. (This proliferation of backslashes can make your scripts look a bit like a blown-over picket fence.)

The Every Item Issue

When writing a script that loops through every item of a BBEdit object (for example, every line of a document), do not do it like this:

```
repeat with i in every line of document 1
   -- do stuff here...
end repeat
```

This forces BBEdit to evaluate "every line of document 1" every time through the loop, which will slow your script significantly. Instead, write

```
set theLines to every line of document 1
repeat with i in theLines
   -- do stuff here...
end repeat
```

More Memory

When running scripts that work with large chunks of data, you may need to increase BBEdit's memory allocation. When BBEdit runs a script, the script and its data are held in BBEdit's application memory partition.

IMPORTANT Moving Scripts from Pre-6.0 Versions of BBEdit

As mentioned earlier, BBEdit's scripting model changed significantly as of version 6.0. Consequently, some of your older scripts may need to be revised in order to work properly. This section provides a high-level overview of BBEdit's scripting model that will, where appropriate, contrast the current scripting framework against older versions of BBEdit. This will suggest how you can modify your existing scripts for compatibility.

Note Because the scripting dictionary is always changing, it should be considered the definitive reference in situations where it and this document differ. We have found Script Debugger from Late Night Software to be an excellent tool for browsing and navigating BBEdit's scripting dictionary. You can find out more at <http://www.latenightsw.com/>.

"Lines" and "Display_lines"

Starting with BBEdit 6.1, the "line" element refers to a "hard" line, that is, a stream of characters that begins at the start of file or after a line break, and which ends at the end of file or immediately before a line break. This is consistent with the previous semantics of "line" in hard-wrapped documents, and these semantics now apply in soft-wrapped documents as well.

The new "display_line" element refers to a line of text as displayed on screen (bounded by soft and/or hard line breaks).

The "startLine" and "endLine" properties of a text object now always refer to the "hard" start and end of lines. In other words, if a text object crosses multiple soft-wrapped lines, the startLine and endLine properties will be the same.

The new "startDisplayLine" and "endDisplayLine" properties have been added to the text object class, and they provide the startLine and endLine semantics for soft-wrapped views from previous versions of BBEdit.

Documents vs. Windows

In versions of BBEdit prior to 6.0, the object classes *document* and *window* could be used interchangeably, and generally had the same properties listed in the scripting dictionary. This is no longer the case, and this constitutes one of the biggest differences between the current version and pre-6.0 versions of BBEdit.

The class *window* now corresponds to a window on screen, and thus the properties of the *window* class now refer strictly to properties of a window on screen. If a document is associated with a window, the document is accessed as the *document* property of the window:

```
document of window 1
```

The class *document* now refers to a document, and as with a window, the document's properties pertain strictly to the condition of a document (that is, something that can be saved to disk and opened later). Note that this does not mean a document must be saved to a file, only that it could be.

As a rule, documents and windows are associated with each other, but it is important to remember that there is not a one-to-one correspondence between windows and documents. For example, the About box is a window which has no document associated with it. Furthermore, in current versions of the application, there is no such thing as a document with no associated window.

Here is a general overview of the object classes used in BBEdit:

Classes of Windows

- *window*: the basic window class contains properties that can be fetched and set for any window on screen: position, size, and so forth.
- *palette*: the palette class refers to windows that float above all others on the screen; the HTML tools palette, scripts list, and so on.

- *text window*: the text window class provides properties which are specific to text-editing windows as on-screen entities. These properties pertain mostly to the display of text in the window: *show invisibles*, *auto_indent*, and so on. In addition to the text-editing-specific properties, the basic window properties are also accessible.

- *group window*: provides a way to reference windows corresponding to open file groups. A group window does not present any properties beyond the basic *window* class, but provides a way to differentiate file group windows from other types of window.

- *disk browser window*: provides a way to reference windows corresponding to open disk browsers. A disk browser window does not present any properties beyond the basic *window* class, but provides a way to differentiate disk browser windows from other types of window.

- *results browser*: provides a way to reference results generated by a batch operation. A results browser does not present any properties beyond the basic *window* class, but provides a way to differentiate results windows from other types of window.

- *search results browser*: a subclass of results browser, referringspecifically to the results of a single-file Find All command or a multi-file search.

Classes of Document

As with windows, there are various classes of document:

- *document*: the basic document class contains properties that apply to any sort of document: whether it has unsaved changes, the alias to the file on disk, and so on.

- *text document*: text documents contain information specific to text files opened for editing in BBEdit. The *text document* class provides much greater access to document properties than before; a text document's Projector state is now accessible, for example, and properties are generally much more consistent.

- *group document*: refers to a document corresponding to an open file group. A file group document does not present any properties beyond the basic *document* class, but provides a way to differentiate file group documents from other types of document.

- *picture document*: refers to a document corresponding to an open picture file. A picture document does not present any properties beyond the basic *document* class, but provides a way to differentiate picture documents from other types of document.

- *movie document*: refers to a document corresponding to an open QuickTime movie file. A movie document does not present any properties beyond the basic "document" class, but provides a way to differentiate movie documents from other types of document.

- *QuickTime document*: refers to a document corresponding to an imported Quicktime image file. A QuickTime document does not present any properties beyond the basic "document" class, but provides a way to differentiate QuickTime documents from other types of documents.

Getting and Setting Properties

One significant improvement in BBEdit's new scripting framework is the ability to get and set multiple properties of an object with a single scripting command. Every object has a property called *properties*. This property returns a record which contains all of the properties which can be fetched for that object. For example, the script command

```
properties of text window 1
```

will return a result like this one:

```
{id:241732, container:application "BBEdit 7.0", bounds:{278, 45,
918, 861}, closeable:true, index:1, modal:false, file:file
"Files:WebSite:index.html", modified:true, name:"index.html",
position:{278, 45}, resizable:true, selection:"some text",
text:text 1 of text window 1 of application "BBEdit 7.0",
titled:true, visible:true, zoomable:true, zoomed:false, display
font:"ProFont", display font size:9, style:{plain}, tab width:4,
auto indent:true, auto balance:true, smart quotes:false, show
invisibles:false, expand tabs:false, soft wrap text:false, soft
wrap mode:Philip bar, soft wrap width:72, show spaces:true, show
status bar:true, show philip bar:true, show tab stops:false,
show cursor position:false, show function position:false, show
line numbers:false, color syntax:true, split proportion:0}
```

Conversely, to set one or more properties at once is very easy:

```
set properties of text window 1 to { show invisibles: true, show
spaces : true, soft wrap text : true }
```

Only the properties specified will be changed. The rest will not be modified.

It is important to note that when setting properties in this fashion, you can only set modifiable properties. If you attempt to set any read-only properties, a scripting error will result:

```
set properties of text window 1 to { show invisibles: true,
modal: false, expand tabs: true }
```

The above script command will turn on Show Invisibles and then report a scripting error, since *modal* is a read-only property.

Scripting Searches

Scripting searches with BBEdit is now fundamentally different from pre-6.0 versions, and significantly more powerful, while being much easier to use.

Consider the scripting command below:

```
tell application "BBEdit 7.0"

find "BBEdit(.+)$" searching in window 1 options ¬
{ search mode: Grep } with selecting match

end tell
```

In previous versions, the *find* command always operated on the front window. Now, you must explicitly specify the text to be searched, either by specifying an explicit tell target, or by supplying a *searching in* parameter. So the following scripts are equivalent:

```
tell application "BBEdit 7.0"
    find "BBEdit" searching in window 1
end tell
```

and

```
tell application "BBEdit 7.0"
    tell window 1
        find "BBEdit"
    end tell
end tell
```

Note that either the tell-target or the *searching in* parameter must resolve to something that contains text. As a shortcut, you can specify a window, and if the window contains text, the search can proceed. You can also specify a text object:

```
find "Search Text" searching in (lines 3 thru 5 of window 2)
```

Also unlike previous versions of BBEdit, the defaults for parameters not specified in the *find* command are no longer controlled by the user interface (that is, the Find & Replace dialog).

When performing a *find*, BBEdit will return a record describing the results of the search. This record contains a Boolean which indicates whether the search was successful, a reference to the text matched by the search, and the text string matched by the search. Given the first example above, the results might look like this (after reformatting for clarity):

```
{ found:true,

found object:characters 1 thru 23 of text window "BBEdit
Scripting Notes" of application "BBEdit 7.0",

found text:"BBEdit Scripting Notes" }
```

Given the above and BBEdit's improved support for the text object model, the single-occurrence *replace* is now obsolete. Instead, to do a single find and replace via AppleScript, you can write:

```
tell application "BBEdit 7.0"

set result to (find "BBEdit" searching in window 1¬
    with selecting match)

    if (found of result) then
       set text of (found object of result) to "Replacement"
    end if

end tell
```

When performing a grep search, you cannot just replace the matched pattern with a replacement string; the grep subsystem needs to compute the substitutions. The *grep substitution* event is provided for this purpose; given a preceding successful Grep search, it will return the appropriate replacement string. So if you perform a grep search, the script would look like:

```
tell application "BBEdit 7.0"

set result to find "BBEdit(.+)$" searching in window 1 ¬
     options {search mode:grep}

    if (found of result) then
         set text of (found object of result) to ¬
             grep substitution of "\\1"
    end if

end tell
```

Note that when using a backslash "\" character in AppleScript, it needs to be "escaped" by means of another backslash; thus, in the above example, "\\1" used in the script, will become the grep replacement string "\1" when passed to BBEdit.

Scripting Multi-File Searches

In BBEdit, a multi-file search is a simple extension of the *find* scripting command. To search a single file or folder for all occurrences matching the search parameters, specify the file or folder as the *searching in* parameter of the search.

For example, to find all occurrences of "index.html" in a web site, one might use the following scripting command:

```
find "index.html" searching in (alias "Files:WebSite:")
```

Likewise, to find JavaScript line comments:

```
find "//.+$" searching in (alias "Files:WebSite:") ¬
    options {search mode: Grep}
```

To search in a single file:

```
find "crash" searching in (alias "Files:WebSite:index.html")
```

Scripting the Clipboard

BBEdit now has multiple clipboards. These are fully accessible via the scripting interface. Most operations (due to the way Mac OS works with respect to clipboard data) require the application to be frontmost.

Here are some examples:

```
count clipboard
```

- Returns the number of clipboards supported by the application

```
clipboard 1
```

- Returns {index:1, contents:"Files:WebSite:", length:14, is multibyte:false, display font:"ProFont", display font size:9, style:{plain}}

```
clipboard 1 as text
```

- Returns "Files:WebSite:"

```
clipboard 1 as reference
```

- Returns clipboard 1 of application "BBEdit 7.0"

```
current clipboard
```

- Returns the current clipboard as a record (you can coerce it to reference or text or get individual properties)

To set the text in a given clipboard to literal text:

```
set contents of clipboard 3 to "foobar"
```

To set the text in a clipboard to text represented by an object specifier:

```
set contents of clipboard 3 to selection of window 2
```

To copy the contents of one clipboard to another:

```
set contents of clipboard 5 to clipboard 3
```

or, to set the current clipboard to the contents of a different clipboard, (thus making it exportable to the system clipboard):

```
set current clipboard to clipboard 3 as text
```

or finally, with even less typing involved:

```
set current clipboard to clipboard 5
```

To make any clipboard the current clipboard, select it:

```
select clipboard 5
```

Working with Scripts

The Scripts menu (left) in BBEdit's menu bar contains several commands. It also lists all OSA scripts present in the Scripts folder within the BBEdit Support folder, providing a quick way to access frequently used scripts. You can place scripts within subfolders (up to 4 levels deep) of the Scripts folder to organize them.

Note Scripts written for use in the menu should be saved as compiled script documents, not script applications.

Scripts Menu

In addition to the list of available scripts, the Scripts menu provides the following commands.

Open Script Editor

Choose this item to switch to your preferred AppleScript editor (as chosen in the Tools panel of the Preferences window). If the script editor is not running, BBEdit launches it.

Open Scripting Dictionary

Choose this item to switch to your preferred AppleScript editor and open BBEdit's scripting dictionary for viewing. If the script editor is not running, BBEdit launches it.

Start Recording

Select this item to record all available actions that you perform within BBEdit (or any other recordable applications which you switch to). When this command is active, the menu item will change to Stop Recording, and a tape icon will flash over the Apple menu. When you choose Stop Recording, BBEdit will display a Save dialog which allows you to save a script file containing the recorded actions.

Scripts Window

The Scripts command, located in the Palettes submenu of the Window menu, opens a floating window listing all available scripts. Names that are too long to fit within the width of the window are truncated with ellipses (…).

new in 7.0 "Hovering" the mouse over such a truncated name displays a tool tip showing the full name. If you hold down the Option key, the tool tip will appear instantly, with no hovering delay. Names that fit entirely within the window without truncation do not display a tool tip.

Organizing Scripts

Items in the Scripts menu or Scripts window are displayed in alphabetical order by default, but you can force them to appear in any desired order by including any two characters followed by a right parenthesis at the beginning of their name. (For example "00)Save All" would sort before "01)Close All.") For names of this form, the first three characters are not displayed in the window. You can also insert a divider by including an empty folder whose name ends with the string "-***". (The folder can be named anything, so it sorts where you want it.) These conventions are the same as those used by the utilities FinderPop and OtherMenu.

Attaching Scripts to Menu Items

BBEdit now lets you attach scripts to menu items. By this, we mean that you can write scripts that BBEdit automatically calls before or after performing a menu command. For example, if you want BBEdit's Open From FTP Server command to launch your favorite FTP client, you can simply attach a script to that menu item. Scripts can return a value that tells BBEdit whether to continue with the command that was selected, or to cancel the operation (in which case only the script is executed).

Scripts attached to BBEdit menu items are stored in the Menu Scripts folder, which should be inside the BBEdit Support folder. These files should be compiled scripts, not script applications. Scripts are named to indicate which menu item they go with: first the name of the menu (or the submenu) upon which the item is immediately located, then a bullet "•" (Option-8) character, then the name of the menu item. For example, to attach a script to the Open From FTP Server menu item, you would name it "File•Open From FTP Server", while to attach a script to the New Document menu item, you would name it "New•Text Document".

Some of BBEdit's menus have icons rather than names. BBEdit uses the following names for its icon menus: "MacPerl" [Mac OS 9 only]/ "#!" [Mac OS X only], "CVS", "Compiler", "Projector", and "Scripts". Furthermore, the New With Stationery submenu is named "Stationery" for purposes of attachability; similarly, the Perl Scripts and Perl Filters menus are named "Perl Scripts" and "Perl Filters", respectively on Mac OS 9, or "Unix Scripts" and "Unix Filters" on Mac OS X.

When you choose a menu item with an attached script, BBEdit runs its MenuSelect handler, if it has one, passing it the menu name and item name of the selected menu item as parameters. If no MenuSelect function is present, BBEdit executes the script's run handler. The MenuSelect handler can return a boolean value to indicate whether BBEdit should continue by performing the action usually invoked by the menu command ("false" means yes, "true" means stop after executing the script). If MenuSelect returns false, BBEdit will call the script's PostMenuSelect handler, if it has one, after it performs the menu command.

Here is a simple example, which adds a confirmation dialog to the Save command (addressed as "File•Save"). Note that we test the menu and item names to make sure the script is attached to the Save command—if it is attached to some other command, it does nothing.

```
on menuselect(menuName, itemName)
  if menuName = "File" and itemName = "Save" then
    set weHandledCommand to true
    display dialog "Are you sure you want to save?" ¬
    buttons {"No", "Save"} default button 2
    if button returned of the result is "Save" then
    -- the application should do its work
    set weHandledCommand to false
    else
    -- we handled the command, app does no work,
    -- postmenuselect doesn't get called
    display dialog "The document was not saved." ¬
      buttons {"OK"} default button 1
    end if
    return weHandledCommand
  end if
end menuselect

on postmenuselect(menuName, itemName)
  -- this is called after the application has processed
  -- the command
  display dialog "The document was saved." ¬
    buttons {"OK"} default button 1
end postmenuselect
```

CHAPTER

14 Working with Development Tools

This chapter describes how to set up BBEdit to work with development environments. You can use BBEdit with MPW SourceServer (Projector) and as an external editor for Metrowerks' CodeWarrior. For Perl development, BBEdit integrates with MacPerl on Mac OS 9, and the native Perl environment on Mac OS X. On Mac OS X, you can also access the CVS version control system, use additional Unix scripting tools such as Python, Ruby, or shell scripts, and employ shell worksheet windows to store and execute frequently used shell commands.

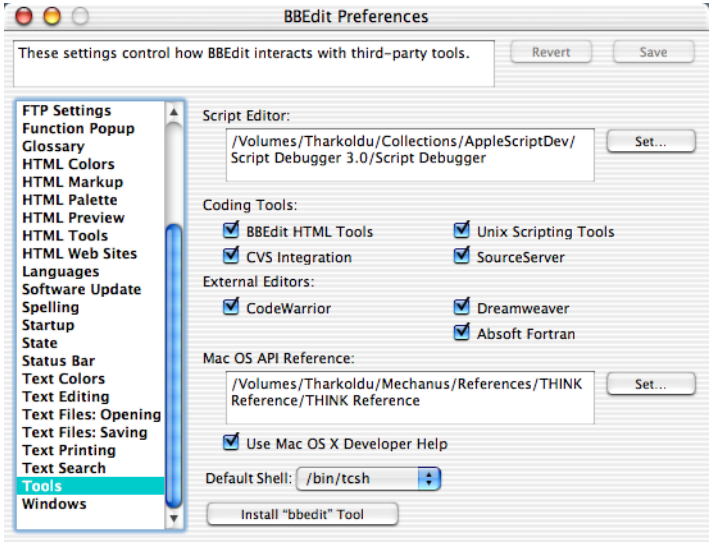
In this chapter

Configuring BBEdit for Development Environments **252**
Syntax Coloring – 253
Working with Development Environments **253**
Switching Between Source and Header Files – 253
BBEdit and the Unix Command Line **253**
Shell Worksheets – 254
Invoking BBEdit from the Command Line – 256
Perl, Python, and Shell Scripting **256**
Using MacPerl on Mac OS 9 – 256
Using Unix Scripts on Mac OS X – 257 • *Language Resources* – 257
Line Endings and Perl/Unix Scripts – 258
MacPerl/Shebang Menu – 259 • *Filters and Scripts* – 261
Filters – 261 • *Scripts* – 262 • *Additional Notes* – 262
Working with CVS **263**
Get Revision – 263 • *Update File* – 263 • *Update Folder* – 263
Commit File – 264 • *Commit Folder* – 264 • *Commit Parent Folder* – 265
Find Lurkers – 265 • *Compare Revisions* – 266
Compare Arbitrary Revisions – 266 • *Get Revision History* – 266
Get CVS Status – 266 • *Add* – 266 • *Remove* – 266
Go to Previous/Next Conflict – 267 • *Export Project* – 267
Open Log File – 267
Working with Metrowerks CodeWarrior **267**
Using the CodeWarrior Menu – 267
Working with Project Builder **269**
Working with Projector/SourceServer **269**
Check In – 270 • *Check Out* – 271 • *Get Revision* – 272
Cancel Check-Out – 272 • *Edit Task Comment* – 272
Compare Revisions – 273 • *Get Revision History* – 273
New Project – 273 • *Check In Folder* – 274 • *Check Out Folder* – 275
Find Lurkers – 276 • *Make Obsolete* – 276
Remove Projector Info – 276 • *Open Log File* – 277

Configuring BBEdit for Development Environments

Before you can use BBEdit with a development environment, you need to let BBEdit know which development environments you plan to use.

Open the Preferences window (by choosing Preferences from the BBEdit menu on Mac OS X or from the Edit menu on earlier Mac OS versions). Select Tools from the list along the left side of the dialog. Click the check boxes to select the development tools you plan to use. (Note that some tools are only available under specific versions of Mac OS. More information can be found in Chapter 10.)



If you made any changes in the default Tools options, click the Save button. Now, you must quit and relaunch BBEdit in order for these changes to take effect.

Note BBEdit no longer supports Kodex, MPW ToolServer, MPW 411, or the THINK C, THINK Pascal, and Symantec C++ environments.

IMPORTANT The ordering of BBEdit's development tools menus has changed for version 7.0. From left to right, after the Window menu are the MacPerl/Shebang menu, the new CVS menu, the Compiler menu, the Projector menu, and the Scripts menu. (Note that depending on your preferences settings and available tools, not all of these menus may be displayed.)

Syntax Coloring

Although it is not essential, you may want to turn on syntax coloring when you use BBEdit with a development environment. When syntax coloring is on, BBEdit displays keywords and other language elements in color. You can turn on syntax coloring by:

- choosing Syntax Coloring from the Text Options pop-up menu in the status bar
- selecting the Syntax Coloring option from the Text Options dialog box
- setting the Syntax Coloring option in the Editor Defaults section of the Preferences window (this sets the default for new windows)

Working with Development Environments

Once you have set up BBEdit for the development environments you plan to use, the development tools communicate with BBEdit to report errors and changes in files. You use the commands in the appropriate menu (the Compiler menu or the MacPerl/Shebang menu) to send instructions to the development environment.

To switch to a development environment (or to launch it if it is not running), choose it from the appropriate menu. When you choose the Compile command (or any other command that causes files in the project to be recompiled), the development environment temporarily becomes the active application. If there are any compilation errors, BBEdit creates a Compile Errors browser that you can use to examine the errors.

Switching Between Source and Header Files

When you edit a C or C++ source file, you can press Control-Tab to switch to the corresponding header file and vice versa. BBEdit uses the information in the Languages section of the Preferences window to determine whether a file is a source or header file.

Note The Application Switcher control panel on Mac OS 9, or the Dock on Mac OS X, will intercept Command-Tab keystrokes by default, so the factory default mapping is now Control-Tab. In BBEdit 7.0, you can change this mapping using the Set Menu Keys command if you so desire. (Previous versions did not allow customization of this key equivalent.)

BBEdit and the Unix Command Line

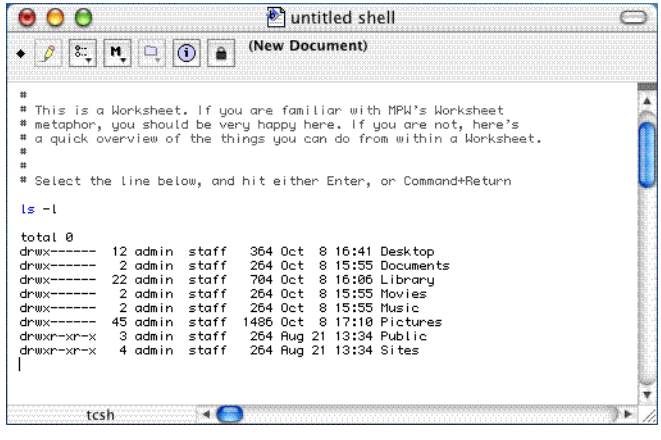
This section describes BBEdit's facilities for interacting with the Unix command line: shell worksheets for issuing commands *to* the Unix shell and the "bbedit" command-line tool for invoking BBEdit *from* the command line.

Shell Worksheets

When running on Mac OS X, BBEdit allows you to store and execute Unix command lines by means of a "shell worksheet." The New submenu of the File menu contains two commands for opening a shell worksheet. The first, "Shell Worksheet (*path*)", opens a worksheet for the default Unix shell that you have designated in the Tools preference panel (where *path* is the pathname of that shell). The second, simply called "Shell Worksheet", displays a dialog box for choosing the desired shell. Either command will open a worksheet window for typing commands to the specified shell.

Using Worksheets

You can type, delete, and edit text in a worksheet window just as in an ordinary BBEdit document window. To invoke a Unix command, type the command, then press the Enter key or Command-Return, or click in the status area at the bottom-left of the worksheet window. (Keep in mind that Enter and Return are different keys; pressing Return by itself inserts a carriage return instead of executing a command.) You can execute more than one command at a time by selecting multiple lines and pressing Enter or Command-Return. The output will appear in the worksheet window below the line or lines containing the commands executed. Unlike a terminal, this does not have to be at the end of the document: you can type commands anywhere in the worksheet window, or place the insertion point back on a previously executed command to run it again.


untitled shell
(New Document)
This is a Worksheet. If you are familiar with MPW's Worksheet
metaphor, you should be very happy here. If you are not, here's
a quick overview of the things you can do from within a Worksheet.
Select the line below, and hit either Enter, or Command+Return
ls -l
total 0
drwx------ 12 admin staff 364 Oct 8 16:41 Desktop
drwx------ 2 admin staff 264 Oct 8 15:55 Documents
drwx------ 22 admin staff 704 Oct 8 16:06 Library
drwx------ 2 admin staff 264 Oct 8 15:55 Movies
drwx------ 2 admin staff 264 Oct 8 15:55 Music
drwx------ 45 admin staff 1486 Oct 8 17:10 Pictures
drwxr-xr-x 3 admin staff 264 Aug 21 13:34 Public
drwxr-xr-x 4 admin staff 264 Aug 21 13:34 Sites
tcsh

Note If the selection range is non-empty, only the exact text selected will be executed; if there is just an insertion point, the entire line containing it will be executed (even if it is not at the end of the line).

new in 7.0 The status area at the bottom-left of the worksheet window shows the name of the Unix process currently executing (or the name of the shell itself when no process is running). This can be useful for seeing what is going on when a process hangs or takes a long time to complete. You can kill the currently running process by typing Control-C or Command-Period in the worksheet window. Also, clicking in the status area sends the currently selected text (or the line containing the insertion point) as a command to the Unix shell.

Keep in mind that shell worksheets are not terminal windows. If you have ever used MPW, you will probably feel right at home using shell worksheets. If you are only familiar with terminal emulators, however, you will find that shell worksheets work quite differently. Command-line-editing gestures do not work, nor will any Unix commands that expect to be dealing with terminals. (For example, try running "emacs" in a shell worksheet.)

When you drag files or folders into a worksheet window, the behavior is different than when dragging these items into an ordinary document window. An unmodified drag of a single file or folder will insert the POSIX-style path of that item at the drop location. Additionally, rather than selecting the inserted text as in a normal editing window, the insertion point will be left at the end of the current line, so you can easily continue entering additional information or execute the line as a command.

new in 7.0 Dragging multiple files and folders will now produce a set of paths for those items, with spaces for separators rather than carriage returns. This makes it easier to add arguments to a line for immediate execution as part of a command.

If you hold down the Command key while dragging, it will cause the file's contents to be inserted (or a folder listing, if the item you are dragging is a folder).

The default working directory for new worksheet windows is the user's home directory. This directory is also used as the search directory for any Open Selection or Open File by Name operations executed from within the worksheet. New shell windows are colored using the "Unix Shell Script" language.

new in 7.0 New shell worksheets initially run in normal user mode as the currently logged-in user. This is indicated by the locked padlock icon on the rightmost button at the top of the worksheet window. You can switch to superuser mode by clicking the padlock button; you will be prompted to enter your administrator password. This is equivalent to executing the command

```
sudo -s
```

in a terminal window; the worksheet's status area will indicate this with a "sudo:" prefix to the current state, and the padlock icon will change to unlocked. Clicking the button again "locks" the padlock and returns to normal user mode.

WARNING If you are not familiar with Unix command-line tools, we strongly urge you to obtain and read an introductory guide to using a Unix shell. Command-line tools can be very useful, but if used incorrectly, they can render files, or even your entire system, unusable.

Default Worksheet Stationery

When creating a new worksheet window, BBEdit will look for a worksheet stationery file named "Default Worksheet Stationery". This file is located in the Stationery subfolder of the BBEdit Support folder. (See Chapter 2 for more information regarding the BBEdit Support folder.) If the default worksheet stationery exists, you will see the contents of this file in every new worksheet window you create.

BBEdit ships with a default worksheet stationery file that provides a small tutorial on using worksheet windows. When you grow tired of seeing this tutorial in every new worksheet, you can either remove the "Default Worksheet Stationery" file from the Stationery folder, or replace it with one of your own.

Invoking BBEdit from the Command Line

When running on Mac OS X, you can use the "bbedit" command-line tool to open files in BBEdit via the Unix command line. The first time you run BBEdit after installation, it offers to install the "bbedit" tool for you. If you choose not to do so, you can use the "Install 'bbedit' Tool" button in the Tools preference panel to install the tool at a later time.

To open a file in BBEdit from the command line, type

```
bbedit filename
```

where *filename* is the name of the file to be opened. To launch BBEdit without opening a file (or activate it, if it is already running), type

```
bbedit -l
```

You can also pipe `stdin` to the "bbedit" tool, and it will open in a new untitled window in BBEdit: for example,

```
ls -la | bbedit
```

If you just type

```
bbedit
```

with no parameters, the tool will accept `stdin` from the terminal; type Control-D (end-of-file) to terminate and send it to BBEdit.

The complete command-line syntax for the "bbedit" tool is

```
bbedit [ -bcehlpuvVw ] [ -e <encoding_name> ]
       [ +<n> ] [ file ... ]
```

See the tool's online man page for a complete description of the available switches and options.

Perl, Python, and Shell Scripting

BBEdit provides robust integration with Perl, Python, and Unix shell scripting languages. Versions of BBEdit prior to version 6.5 understood Perl syntax and would color Perl source code appropriately; these versions could run Perl scripts and provided support for special kinds of scripts known as *filters*, which operate on the text in a BBEdit document window, very much like BBEdit plug-ins. Starting with version 6.5, when running on Mac OS X BBEdit extends the support provided in previous versions for Perl to encompass other Unix scripting languages, such as Python and shell scripts.

Using MacPerl on Mac OS 9

On Mac OS 9, BBEdit works with the Macintosh version of Perl, dubbed MacPerl. MacPerl is free software, and can be downloaded from the MacPerl web site. BBEdit can not run Python or Unix shell scripts when running on Mac OS 9, but it will provide syntax coloring and function browsing for files containing code in these languages.

```
http://www.macperl.org/
```

BBEdit's MacPerl features are accessed through the MacPerl menu, pictured at left. (Why a camel? Because the camel is both the official mascot of the Perl programming language, and also the Finder icon for the MacPerl application.)

Using Unix Scripts on Mac OS X

When running on Mac OS X, BBEdit works with the native Unix Perl tool. Starting with version 6.5, BBEdit supports similar integration with Python, shell scripts, and any other Unix scripting language. The default Mac OS X installation includes Perl and several Unix shells (including tcsh and zsh).

If you are running Mac OS X 10.2 or later, Python is now provided as part of the default installation. However, if you are running Mac OS X 10.1.5, you will need to install Python separately; see the Python web site for download links and installation instructions. (Note that for integration with BBEdit, you will need the Unix-flavored version of Python for Mac OS X, *not* the Carbonized version of MacPython.)

```
http://www.python.org/
```

BBEdit's Unix shell scripting features—which encompass Perl, Python, shell, and any other Unix scripting language—are accessed via the new Shebang menu: "#!". (Why "Shebang"? Because executable Unix scripts traditionally start with the two-character sequence "#!". Some people pronounce these two characters "hash-bang," others say "sharp-bang," but the most common pronunciation is simply "shebang.")

The "shebang line" is the first line of the script, and includes a Unix-style path to the interpreter for the language—for example, "#!/usr/bin/perl", or "#!/usr/local/bin/python".

Note In particular, BBEdit expects to find Python in /usr/bin, /usr/local/bin, or /sw/bin. If you have installed Python elsewhere, you must create a symbolic link in /usr/local/bin pointing to your copy of Python in order to use pydoc and the Python debugger.

While BBEdit does not entirely depend upon the accuracy of the shebang line for Perl and Python files (if you have the correct language mapping set for the file contents), it is a good practice for these, and necessary for any other shell scripts, that the shebang line given must be a correct full path to the executable.

Note Starting with BBEdit 6.5, the Shebang menu completely supersedes the Camel menu, and encompasses the same commands (although some of the commands are not applicable to every scripting language, as noted below).

Language Resources

Perl is an acronym for Practical Extraction and Report Language (or alternatively, Pathologically Eclectic Rubbish Lister) and was developed by Larry Wall. If you are interested in learning Perl, the quintessential Perl references are:

Learning Perl (3rd Edition), by Randal L. Schwartz & Tom Phoenix.
O'Reilly and Associates, 2001. ISBN: 0-596-00132-0

Programming Perl (3rd Edition), by Larry Wall, Tom Christiansen, Jon Orwant.
O'Reilly and Associates, 2000. ISBN: 0-596-00027-8

The following are excellent Internet resources for the Macintosh implementation of Perl, and Perl in general:

Perl.com from O'Reilly and Associates
`http://www.perl.com/`

MacPerl.org
`http://www.macperl.org/`

Perl and MacPerl Mailing Lists
`http://www.macperl.com/depts/mlists.html`
`http://lists.perl.org/`

Picking Up Perl, a freely redistributable Perl tutorial book by Bradley M. Kuhn
`http://www.ebb.org/PickingUpPerl/`

comp.lang.perl.misc, comp.lang.perl.moderated Usenet news groups

Python is a portable, interpreted, object-oriented programming language, originally developed by Guido van Rossum. If you are interested in learning Python, consider the following books:

Learning Python, by Mark Lutz & David Ascher. O'Reilly and Associates, 1999. ISBN: 1-56592-464-9

Programming Python (2nd Edition), by Mark Lutz. O'Reilly and Associates, 2001. ISBN: 0-596-00085-5

Internet resources for Python:

Python home page
`http://www.python.org`

Python Cookbook
`http://aspn.activestate.com/ASPN/Cookbook/Python`

comp.lang.python Usenet news group

Line Endings and Perl/Unix Scripts

To execute scripts, the script interpreter for any given language requires source code to be encoded with native line endings—Macintosh line breaks for MacPerl, and Unix line breaks for Unix Perl and the other shell scripting languages on Mac OS X. BBEdit will automatically make sure that the script source sent to each interpreter matches its line ending expectations. This means that on Mac OS 9, BBEdit will send scripts to MacPerl with Macintosh line endings, regardless of the line endings of the file on disk; and on Mac OS X, BBEdit will always send scripts to Perl, Python, and other script interpreters with Unix line endings.

You can thus save your scripts and filters with whatever line breaks you choose, and BBEdit will do the right thing behind the scenes to make sure the interpreter for each language gets the line endings it expects. This also means that for Perl, the same scripts and filters will work on both Mac OS 9 and Mac OS X.

MacPerl/Shebang Menu

The commands in this menu are also available in a floating tool palette, called "Perl Tools" on Mac OS 9, and "Unix Scripting Tools" on Mac OS X. In either case, the palette is accessible via the Palettes submenu of the Window menu.

Open MacPerl

Available only on Mac OS 9, this command locates and launches the MacPerl application. At the first launch, the MacPerl application is located by its creator type. If you have more than one copy of MacPerl installed, this will usually find the version with the most recent modification date. If you prefer to use a different version of MacPerl, simply launch that copy of MacPerl yourself, via the Finder.

If you hold down the Option key, this command changes to Open Shuck, and selecting it will launch Shuck, MacPerl's helper application for viewing POD documentation files.

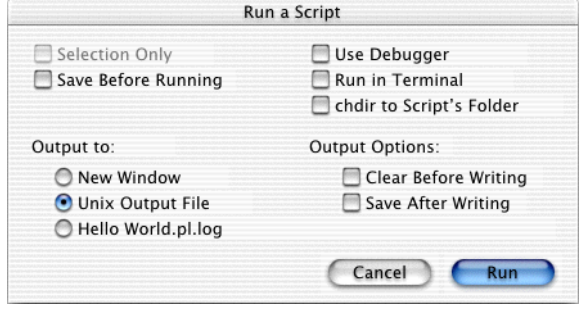
Check Syntax

Checks the syntax for the frontmost window. Errors are displayed in a standard BBEdit error browser (see Chapter 9, "Browsers," for more details on working with error browsers). This command is only available for Perl scripts.

Run

Runs the script in the frontmost window by default. Any output from the script is displayed in a new BBEdit window. On Mac OS 9, this output window is titled "Perl Output", and the file is created in the MacPerl Support folder in the BBEdit Support folder. On Mac OS X, the output window is titled "Unix Script Output", and the file is created in the Unix Support folder in the BBEdit Support folder. By default, errors for Perl and Python scripts are displayed in an error browser; errors for other languages are displayed as text in the output window.

Hold down the Option key while choosing Run to display the Run a Script dialog, which allows you to set options that will be used when the command is executed.



Selection Only: Check this box to execute only the selected text in the frontmost document window.

Save Before Running: Check this box to save the source file before running the script.

Output to: Choose to display output in a new window, to direct it to the Perl/Unix Output file, or to write it to a file in the Logs folder in the Perl/Unix Support folder.

Use Debugger: Check this box to run Perl or Python scripts in the interpreter's debugger.

Run in Terminal/Run in MacPerl: On Mac OS X, this command runs the script in a new Terminal window. On Mac OS 9, it runs the script in MacPerl, and brings the MacPerl application to the foreground.

Chdir to Script's Folder: Check this box to set the working directory to the folder that contains the script before running it.

Output Options: Mark these checkboxes to clear the output file before writing and to save it after writing, respectively.

Run in MacPerl

Available only on Mac OS 9, this command will run the script in MacPerl, regardless of the most recent settings in the Run Perl Script dialog above.

Run in Terminal

Available only on Mac OS X, this command will run the script in a new Terminal window, regardless of the settings in the Run Perl Script dialog.

Run in Debugger

Runs the script in the interpreter's debugger, regardless of whether the Use Debugger option is set for the Run command; also, any output options set in the Run command will be ignored. The Run in Debugger command is only available for Perl and Python.

Run File

Runs a script from an arbitrary file rather than from a BBEdit window. The Run a Script File dialog appears. You can select a file by clicking the File button or by dragging a file to the path box at the top of the dialog from the Finder. The options are the same as the ones described above for the Run a Script dialog.

Export To

Available only on Mac OS 9, this command exports the current document to a CGI Script, a Droplet (a drag-and-drop application), or a Runtime (a self-contained script that does not require MacPerl installed to execute). If additional export file format extensions are installed in the MacPerl Extensions folder (in the same folder as MacPerl itself), these will appear in this submenu as well. (These features are specific to MacPerl.)

Note When asking MacPerl to edit a Perl runtime, BBEdit will first check to see whether it is configured as the Editor helper in the Internet control panel. If the Editor helper does not exist or does not point to BBEdit, BBEdit will ask you if you want to change this helper setting. If you choose Yes, BBEdit will set the Editor helper to point to itself and proceed, otherwise it will abort (and not ask MacPerl to edit the runtime).

Find in Perl Reference/Find in Reference

Looks up the selected text using the appropriate reference application. If there is no selection, a dialog will open in which you can enter a search string.

On Mac OS 9, this command is named Find in Perl Reference, and reference lookups are displayed in Shuck, a POD viewer that comes with MacPerl.

On Mac OS X, this command is named Find in Reference, and reference lookups are performed by command-line tools (perldoc for Perl, pydoc for Python) and displayed as text in a window in BBEdit. The Find in Reference command is not available for languages other than Perl and Python.

View POD

Views the current window as POD. On Mac OS 9, the window is opened in Shuck. On Mac OS X, the window contents are processed by the command-line pod2text tool and then displayed in a new window in BBEdit.

Note POD stands for Plain Old Documentation, and is the standard Perl documentation format.

Filters and Scripts

Before you begin using MacPerl or Unix scripts with BBEdit, you should locate and familiarize yourself with the MacPerl Support and Unix Support folders, both of which reside in the BBEdit Support folder. (See Chapter 2 for details about the BBEdit Support folder.) Inside these folders are subfolders for storing Filters, Scripts, and other files used for MacPerl and Unix shell scripting integration.

If you are running BBEdit on Mac OS 9, it will use the MacPerl Support folder. If you are running Mac OS X, BBEdit will use the Unix Support folder.

The contents of these two folders will be used to build the Scripts list and Filters list, two floating palettes that allow you to run your scripts or filters with a double-click. Scripts and filters placed in these folders will also appear in their respective submenus at the bottom of the MacPerl/Shebang menu.

Filters

Filters operate on the selected text of the frontmost window. The current selection is passed as input to the filter, and any output generated by the filter overwrites the selection. In other words, filters act like plug-ins for text manipulation.

There are two ways to run filters: through the Filters list palette or the Filters submenu at the bottom of the MacPerl/Shebang menu. To open the Filters list palette, select it from the Palettes submenu in the Window menu. You can run a filter by selecting it from the list and clicking the Run button, or you can simply double-click the filter name in the list.

Hold down the Option key while double-clicking a filter or selecting it from the menu to open the file for editing instead of running it.

Optionally, filter output can be sent to a different window, instead of overwriting the selection—hold down the Command key while selecting a filter from the Filters list palette, or from the Filters submenu, to open the Filter Options dialog. Changes made in the Filter Options dialog affect all filters, and remain in effect until you make changes in the Filter Options dialog again.

Using Filters with Multi-Byte Text

Filters are now two-byte savvy. If the front window is Unicode, the selection is written out as big-endian Unicode with a byte-order mark. Your filter is responsible for handling the input correctly. If the front window contains 8-bit text, the input is written out as usual.

Scripts

Scripts are similar to filters, but do not operate on the text of the frontmost window. Like filters, you can run scripts from either a submenu at the bottom of the MacPerl/Shebang menu, or from the Scripts list palette. The same options as for filters apply when running scripts—hold down the Command key while double-clicking a script in the list or selecting it from the menu to open the Run Options dialog; hold down the Option key while double-clicking on a script or selecting it from the menu to open the file for editing instead of running it.

Additional Notes

In addition to the features detailed above, there are some additional considerations about BBEdit's Perl integration which it may help you to be aware of.

Setting Menu Keys for Filters and Scripts

The Filters and Scripts lists both have a "Set Key" button at the top of their palettes. Select a filter or script from the list and click this button to set a keyboard shortcut for the selected item.

Manually Sorting the Filter and Script Lists

By default, items in the Perl Filters List are displayed in alphabetical order. However, you can force them to appear in any desired order by including any two characters followed by a right parenthesis at the beginning of their name. (For example "00)Foo" would sort before "01)Bar.") For such files, the first three characters are not displayed in BBEdit. You can also insert a divider by including an empty folder whose name ends with the string "-***". (The folder can be named anything, so it sorts where you want it.) These conventions are the same as those used by the utilities FinderPop and OtherMenu.

Canceling Perl Operations

While waiting for a MacPerl task to complete, BBEdit will display a progress dialog. If you need to cancel the operation, you can switch to MacPerl and do so there -- the Perl task is canceled and the BBEdit task is then canceled as well. (BBEdit cannot cancel the task directly, because there is no way to signal MacPerl to do so.)

On Mac OS X, the progress dialog for Unix scripting tasks has an enabled Cancel button, and you can cancel the task directly from within BBEdit. Since BBEdit must kill the spawned Perl (or Python, or shell) process with a SIGINT, any unflushed data in open filehandles (including STDOUT and STDERR) will be lost unless the script takes measures to prevent this.

Out-of-memory Conditions in MacPerl

MacPerl will inconveniently run out of memory at times. Sometimes it outputs a string to STDERR saying so, and sometimes it does not. What it does always do is report an error back via an Apple Event. When this happens, BBEdit will report a MacPerl error of type "n" where n is the error number, usually 2. This is not useful for performing specific diagnostics, but at least you will know that something went wrong. In the case of Perl filters, the selection is not cleared when this happens. Instead, you receive an error message telling you that something went wrong in MacPerl.

Working with CVS

BBEdit now has integrated support for CVS (the Concurrent Versions System source control package) when running on Mac OS X.

CVS Information

`http://www.cvshome.org/`

In order to use BBEdit's CVS integration, you will need to turn on the appropriate option in the Tools preference panel, and configure your local CVS setup and repository access from the command line. How this is done varies from user to user and from organization to organization. The below article on Apple's web site provides a general overview of using CVS with Mac OS X; for more details, you should consult your local CVS guru as necessary.

Mac OS X: Version Control with CVS

`http://developer.apple.com/internet/macosx/cvsoverview.html`

Once you have configured CVS, you can proceed to work with files and folders in your local repository using the commands on BBEdit's CVS menu.

Get Revision

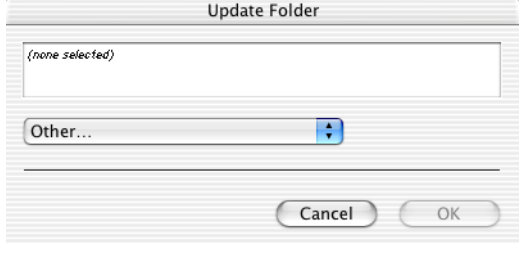
When working with a file that is in a CVS repository, you can choose this command to bring up a dialog box listing all the different revisions of the file, and select any of these to replace the contents of the current file.

Update File

This command replaces a file with the latest revision of that file from the CVS repository. To update the file in the front-most window, choose Update File from the CVS menu. To update any file on disk, hold down the Shift key while choosing Update File from the CVS menu, and choose a file from the Open dialog that appears.

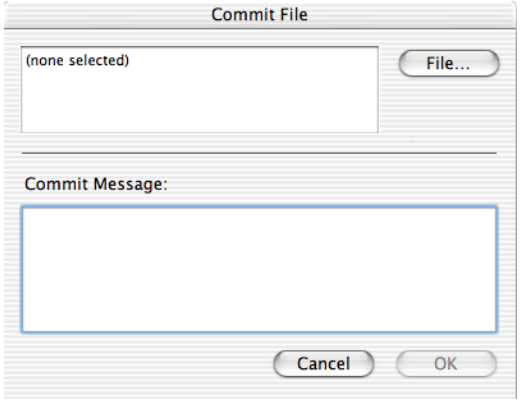
Update Folder

When you choose this command, and select a folder in the Update Folder dialog, BBEdit will update all of the files contained in the folder to the latest available revisions. You can select any recently accessed folder from the pop-up menu, or choose the Other entry to bring up an Open dialog, allowing you to navigate to and choose any desired folder to update. You can also drag a folder from the Finder directly into the path box.



Commit File

Choosing this command displays a dialog that lets you select a file to commit into the repository. If the document has unsaved changes, it will be saved first. By default, this command commits the file corresponding to the front window. To choose a different file, use the File button. To enter comments, use the Commit Message field.



Note Although BBEdit lets you commit a file without a comment, it's considered good form to supply a comment that summarizes the changes you made to the file.

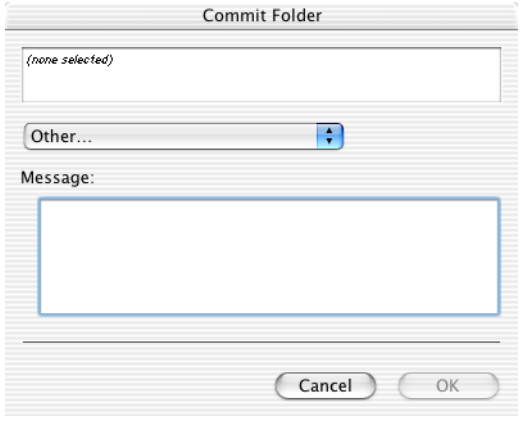
To commit the file corresponding to the frontmost window without displaying a dialog box, hold down the Option key as you choose this command from the CVS menu.

Note You cannot commit a file without having first added it to the repository using the Add command.

Commit Folder

When you choose this command and select a folder in the Commit Folder dialog, BBEdit will commit all of the files contained in that folder which have changed, and any comment that you enter in the Message field will be applied to each file that is committed.

You can select any recently accessed folder from the pop-up menu, or choose the Other entry to bring up an Open dialog, allowing you to navigate to and choose any desired folder to commit. You can also drag a folder from the Finder directly into the path box.



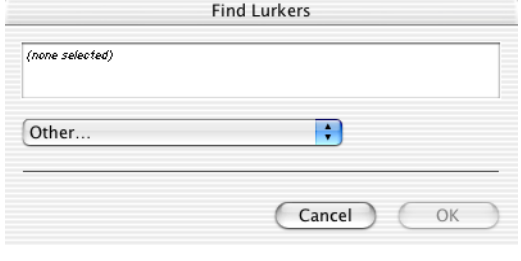
Commit Parent Folder

When you choose this command, BBEdit will prompt you for a comment using the Commit Folder dialog, and then commit all of the files contained in the parent folder of the current document, just as if you had selected that folder and chosen the Commit Folder command. If you do not need to enter a comment, hold down the Shift key as you choose this command, and BBEdit will commit the folder's files without displaying a dialog box.

Find Lurkers

When you choose this command and select a folder in the Find Lurkers dialog, BBEdit will check whether any files contained within that folder have uncommitted changes. If there are any such files, BBEdit will display a results browser containing a list of them.

You can select any recently accessed folder from the pop-up menu, or choose the Other entry to bring up an Open dialog, allowing you to navigate to and choose any desired folder to commit. You can also drag a folder from the Finder directly into the path box.



Compare Revisions

When working with a file that is in a CVS repository, you can use this command to access a dialog listing all available revisions of the file. When you choose a revision from the list, BBEdit will check that revision out into a temporary file, and automatically perform a Find Differences between it and the current file.

Compare Arbitrary Revisions

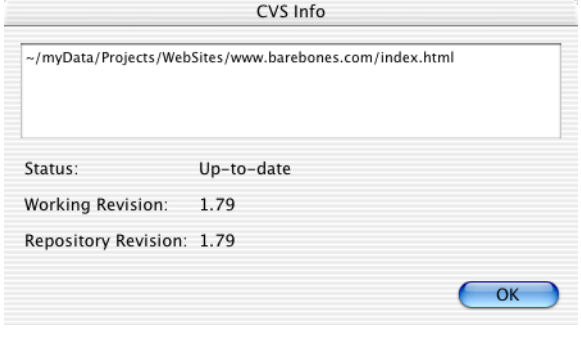
When working with a file that is in a CVS repository, hold down the Shift key and Compare Revisions becomes Compare Arbitrary Revisions. You can use this command to bring up a dialog which contains two lists, each of which shows all available revisions of the file. Choose a revision from each list to have BBEdit check them out into temporary files, and automatically perform a Find Differences between them.

Get Revision History

When working with a file that is in a CVS repository, choosing this command will write out a complete revision history for the file in text form to the "CVS.log" file.

Get CVS Status

When working with a file that is in a CVS repository, choosing this command will bring up the CVS Info dialog, which displays the local path to the file, and its current status and revision information.



Add

When you choose this command, BBEdit will add the current file to the appropriate CVS repository if it is not already present. Note that after using this command, you must also perform a Commit in order to store the file's contents to the repository.

Remove

When working with a file that is in a CVS repository, you can choose this command to remove the file from the repository. Note that after using this command, you must also perform a Commit Parent Folder (or a Commit Folder on the repository as a whole) before the file will actually be removed.

Go to Previous/Next Conflict

When you perform a CVS update on one or more files, if there are conflicts between your revisions and those in the repository, CVS will add markers in the affected file(s) at the appropriate points. If you update a single file and one or more conflicts result, BBEdit will automatically jump to the first conflict and you can use these commands to move to other instances (if any exist). If you update multiple files and conflicts result, you can choose either of these commands to move between instances of conflicts in a file. If there are no conflicts in the current file, BBEdit will beep when you select either command.

Export Project

new in 7.0.2 This command creates a copy of a project at the selected location. When you choose this command, BBEdit displays a dialog that lets you choose a CVS project and then displays a Save dialog that lets you choose the location in which to create a copy of it.

Open Log File

Opens the "CVS.log" file, or brings it to the front if it is already open. (This file is stored in the "Log files" folder within the "BBEdit Preferences" folder.)

Working with Metrowerks CodeWarrior

The following sections describe the range of commands which you can send to Metrowerks' CodeWarrior. For complete information on setting up and using BBEdit as an external editor with the CodeWarrior IDE, please refer to the appropriate section of your CodeWarrior user manual.

Note Due to the continual change in CodeWarrior project format, BBEdit does not currently offer support for browsing or performing Find Differences on such files.

Using the CodeWarrior Menu

This section describes each of the commands in the CodeWarrior menu (left).

CodeWarrior IDE

Choose this item to switch to CodeWarrior. If CodeWarrior is not running, BBEdit launches it.

Compile

This command tells CodeWarrior to compile the source file in the active window. The active window must belong to a project that is open in the development environment.

Check Syntax

This command tells the target development environment to check the syntax of the source file in the active window. The active window must belong to a project that is open in the development environment.

Show in Debugger
This command makes the selected text visible in the source-level debugger if the debugger is running.

Set Breakpoint
Use this command to make the selected text visible in the source-level debugger and to set a breakpoint. If you hold down the option key when you open the Compiler menu, this command becomes Set Breakpoint & Go, which sets the breakpoints and begins execution of the program.

If CodeWarrior's source-level debugger is not active, this command is not available.

Add
If the active editing window has been saved on disk, and it is not part of an open project, this command adds the file to the project.

Add & Compile
If the active editing window has been saved on disk, and it is not part of an open project, this command adds the file to the project and compiles it. This command is the same as using the Add command followed by the Compile command.

Precompile
Tells CodeWarrior to precompile the source file in the active window. BBEdit displays a standard file dialog that lets you specify the name of the precompiled header.

The active window must belong to a project that is open in CodeWarrior.

Preprocess
Tells CodeWarrior to preprocess the source file in the active window and to place the results in a new untitled editing window. The active window must belong to a project that is open in CodeWarrior.

Bring Up To Date
Tells CodeWarrior to check the project for modified files and to recompile and reload any files that have changed.

Make
Tells CodeWarrior to issue a make command to recompile and link all modified files in the open project.

Debug
Tells CodeWarrior to run the open project in the CodeWarrior debugger.

Run
Tells CodeWarrior to run the open project *without* using the source debugger. If choosing this command causes CodeWarrior to recompile files, compiler errors may not be reported to BBEdit. If that happens, use Make instead, and then select Run.

Working with Project Builder

new in 7.0 Project Builder is Apple's native development environment for Mac OS X. If you have version 2.1 or later of Project Builder installed, you can configure it to use BBEdit as an external editor. (Earlier versions of Project Builder do not incorporate external editor support.)

To enable this integration, first, turn on the "Project Builder" option in the Tools panel of BBEdit's Preferences window. Then, switch to Project Builder, open its Preferences window, and select the "file" node in the File Types section. Use the popup-menu for the Preferred Editor field of this node to choose "External Editor", and the attached submenu to select BBEdit from the list of available editors.

Once you have completed these steps, Project Builder will automatically ask BBEdit to open any files you select, and BBEdit will notify Project Builder whenever you save a file that it asked BBEdit to open.

Note Project Builder 2.1 is available on the December 2002 Developer Tools CD-ROM.

Working with Projector/SourceServer

MPW is the Macintosh Programmer's Workshop, Apple's development environment for use with Mac OS 9 or earlier system versions. The complete MPW package can be downloaded at no cost from Apple's developer web site.

MPW ToolZone

`http://developer.apple.com/tools/mpw-tools/`

You can use BBEdit to edit source files that are being managed by Projector, the database-backed source-control system integrated into the MPW Shell. (To get the most out of this capability, you should already be familiar with MPW's source-management functions.) Projector is also available in a stand-alone MPW application called SourceServer, for those who do not want to run the whole MPW Shell for this functionality. Either method works seamlessly with BBEdit via the Projector pull-down menu, identified by the icon shown at left. Before you start, make sure SourceServer support is enabled in the Tools preference panel.

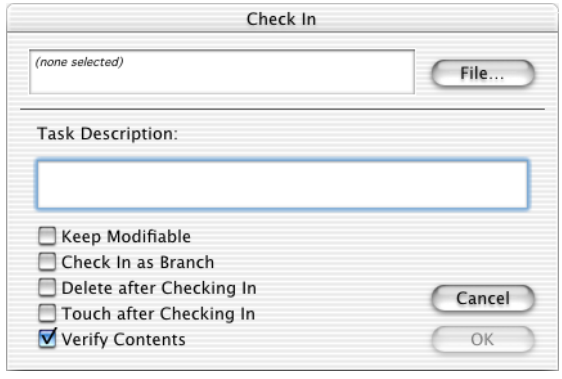
Note In versions of BBEdit prior to 5.1, you had to mark a checkbox when opening a file, or in the Preferences, to have BBEdit recognize Projector information attached to a file. BBEdit now always recognizes Projector state information, and this feature cannot be disabled.

Note Since Projector is only available for Mac OS 9, you can run it on Mac OS X only under the Classic environment.

Note BBEdit no longer supports ToolServer, the MPW "back end" that runs scripts and MPW tools.

Check In

Checks the source file in the frontmost window (or some other file) into the project. The local copy will be deleted. The Check In dialog appears.



File

This field defaults to the frontmost window's file. Click the File button to choose a different file, or drag a file from the Finder to the rectangle displaying the file path.

Task Description

A notes field that can be used to record the reason the file was checked out.

Keep Modifiable

Check this box to allow you to continue to edit the file after it has been checked in. Use this function when you wish to record a revision but are not yet finished working on the file.

Check In as Branch

Check this box to start a new branch on the source tree for this file.

Delete After Checking In

Check this box to delete the local copy of a file after checking it in.

Touch After Checking In

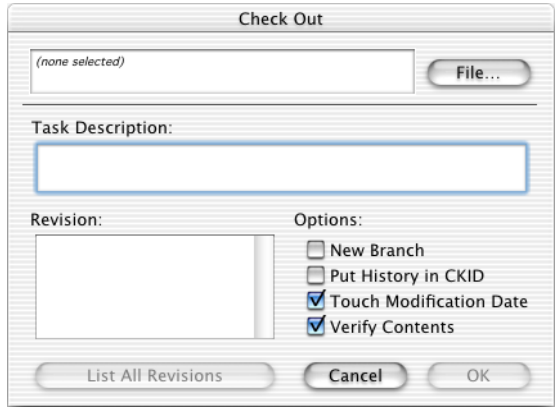
Check this box to set the source file's modification date and time to the current date and time.

Verify Contents

Check this box to make sure the file written to the database matches the local file before deleting the local file.

Check Out

Checks the source file in the frontmost window (or some other file) so it can be modified. When you open a file which contains Projector information, you are not permitted to edit it until you formally check it out using this command. The Check Out dialog box appears.



File

This field defaults to the frontmost window's file. Click the File button to choose a different file, or drag a file from the Finder to the rectangle displaying the file path.

Task Description

A notes field that can be used to record the reason the file was checked out.

Revision

Lists the available revisions of the document. By default, the current local version is selected. Click List Previous Revisions to retrieve a list of all revisions from the database.

New Branch

Check this box to start a new branch on the source tree for this file.

Put History in CKID

Check this box to store the revision data in the document's 'ckid' resource. If this is done, the Revision list will display a list of all revisions without having to check in the Projector database.

Touch Modification Date

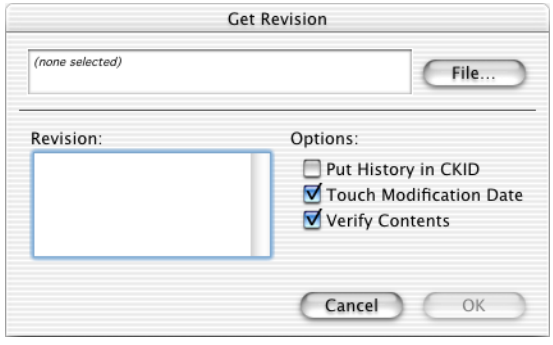
Check this box to set the source file's modification date and time to the current date and time.

Verify Contents

Check this box to make sure the file you are checking out is actually the same file as the one in the Projector database. Projector does this by checking out another copy, comparing the two files, and then deleting the copy.

Get Revision

Gets a revision for the current document or for some other file. The Get Revision dialog appears.



Get Revision works on files that have been checked out or on which Modify Read Only has been used. It will perform a checkout or Modify Read Only operation if necessary, and notifies you that you will lose your changes.

File

This field defaults to the frontmost window's file. Click the File button to choose a different file, or drag a file from the Finder to the rectangle displaying the file path.

Revision

Lists the available revisions of the document.

Put History in CKID

Check this box to store the revision data in the document's 'ckid' resource as well as in the database. (If this is done, the Revision list will display a list of all revisions without having to check in the Projector database.)

Touch Modification Date

Check this box to set the source file's modification date and time to the current date and time.

Verify Contents

Check this box to make sure the file you are checking out is actually the same file as the one in the Projector database. Projector does this by checking out another copy, comparing the two files, and then deleting the copy.

Cancel Check-Out

If the front window is checked out, this command discards any changes made to it and retrieves the latest version. Hold down the Shift key to choose a file to be canceled instead of canceling the front window.

Edit Task Comment

Choose this command to edit the checkout comment for this file. Hold down the Shift key to choose a file instead of editing the comment for the front window.

Compare Revisions

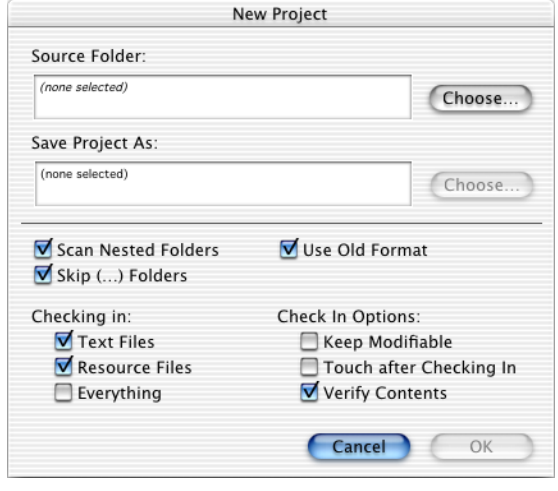
This command compares the contents of the frontmost window with another revision of the file. You will be prompted to choose the desired revision (the current version you have on disk is highlighted when the dialog opens). The results will appear in the same format used by the Compare Files command (see page 73).

Get Revision History

This command retrieves a complete version history of the frontmost window and displays it in a new BBEdit document window.

New Project

Creates a new project database from an existing folder of source files. If any of the files are already in a project, they will be orphaned before the new project is created. The New Project dialog appears.



The New Project command skips over files named ".DS_Store" and ".FBCIndex", folders named ".FBCLockFolder", and invisible files (like "Icon^M"). If for some perverse reason you want these files checked in, the "Check In" command will allow you to do so.

Save Project As

Click the Choose button to specify the location of the database, usually on a server volume.

Search Folder

Click the Choose button to choose the folder that contains your source files., or drag the folder from the Finder to the gray box.

Scan Nested Folders

Check this box to scan all subfolders of the selected folder for files to include in the new project.

Skip (...) Folders
Check this box to have BBEdit skip any files whose names are enclosed in parentheses when scanning.

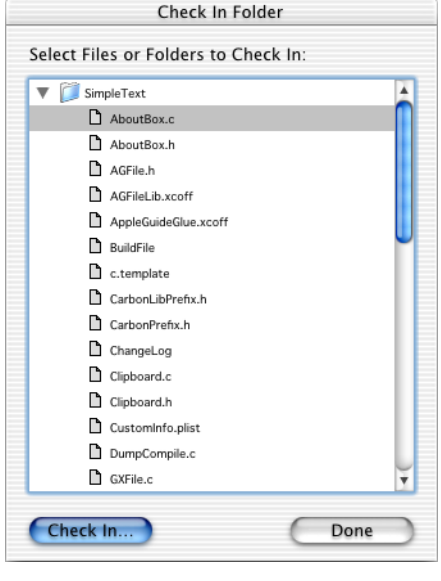
Checking In
Check the boxes for the types of files you want to add to the project. You can choose text files, resource files, or all files.

Keep Modifiable
Check this box to allow you to continue to edit the file after it has been added to the project. Use this function when you wish to record a revision but are not yet finished working on the file.

Touch after Checking In
Check this box to set the source file's modification date and time to the current date and time.

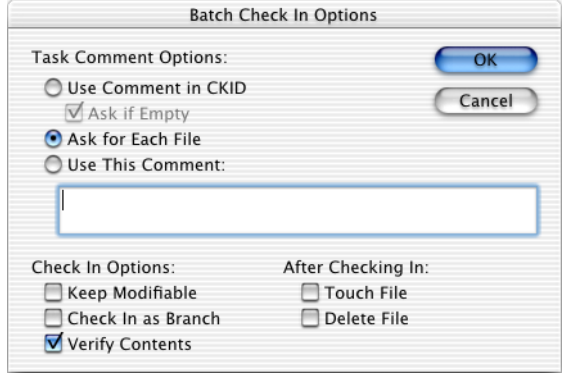
Verify Contents
Check this box to make verify the contents of the file after adding it to the Projector database. Projector does this by checking out another copy, comparing the two files, and then deleting the copy.

Check In Folder
Allows you to check in an entire folder of files at once. You are first prompted for the folder that contains the files you want to check in. Then a folder browser like the one below appears showing all the files in that folder and its subfolders.



Select the file or files to be checked in (you can select multiple files by holding Shift or Command while you click) or press Command-A to select all listed files. Then click the Check In button. If you have selected one file, the Check In dialog, discussed on page 270, appears to allow you to set the check-in options. If more than one file is selected, the Batch Check In Options dialog (next page) appears.

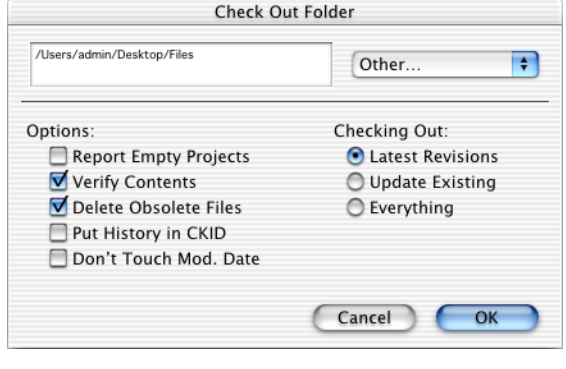
The bottom part of the Batch Check In Options dialog offers essentially the same functionality as is found in the Check In dialog. The top of the Batch Check In Options dialog controls how the check-in comments for these files are set. You can choose to use the comment in the file's 'ckid' resource, to prompt for the comment for each file, or to use a single comment for all checked-in files.



After you have set the options using one of these dialogs, click OK to check in the files. The Check In Folder dialog will remain on the screen after check-in is complete. You can check in sets of files using different check-in options by choosing other files and then clicking Check In again. Click Done when you have finished checking in files.

Check Out Folder

Use this command to check out an entire folder of files at once. The Check Out Folder dialog, below, appears.



Click the pop-up menu to select the folder to be checked out, or drag a folder from the Finder. The menu contains a list of recently used folders.

Report Empty Projects
Check this box to have BBEdit notify you if it finds an empty project during the check-out process.

Verify Contents
Check this box to make sure the file you are checking out is the same file displayed in the document window. Projector does this by checking out another copy, comparing the two files, and then deleting the copy.

Delete Obsolete Files
Check this box to have files marked as "obsolete" in the Projector database deleted from the folder.

Put History in CKID
Check this box to store the revision data in the document's 'ckid' resource. If this is done, the Revision list will display a list of all revisions without having to check in the Projector database.

Don't Touch Mod Date
Check this box to prevent Projector from updating the files' modification date to today's date.

Checking Out:
Choose which files to check out:

- Latest Revisions fetches a copy of every file in the project which is newer than the corresponding local project. Any new files which were added to the project since the last checkout will also be checked out.
- Update Existing fetches a copy of every file in the project which is newer than the corresponding local project. Any new files added to the project since the last checkout are *not* checked out.
- Everything fetches a copy of the latest revision of every file in the project.

Find Lurkers
Choose this command and BBEdit will ask you to select a folder. BBEdit will produce a list of all the files which are currently checked out as writable, MRO'd, or new in that folder (recursively).

Make Obsolete
Marks the current document as "obsolete" in the Projector database. BBEdit will close the document's editing window, and move the associated file to the Trash. Hold down the Shift key to choose a file instead of obsoleting the frontmost window's file.

Remove Projector Info
Removes the 'CKID' resource from the current file, losing all embedded Projector state information and comments. Hold the Shift key to choose a file instead of operating on the frontmost window.

Open Log File

Opens the “SourceServer.log” file, or brings it to the front if it is already open.

CHAPTER

15 BBEdit Plug-Ins

BBEdit plug-ins are code modules that enhance BBEdit's features, and which appear within BBEdit itself in the Tools menu. This chapter describes the basic plug-ins that ship with BBEdit. Other developers have also written many BBEdit plug-ins, some of which are included on the BBEdit CD-ROM, and many more are available from various web sites (including our own).

If you would like to write your own plug-ins for BBEdit, please refer to the BBEdit Plug-in Developer's Kit, available from the Bare Bones Software web site.

In this chapter

Using BBEdit Plug-Ins **279**
Installing Plug-Ins – 280 • *The Tools Menu and Floating Window* – 280
The Set Key Button – 280
Supplied Plug-Ins **281**
Add/Remove Line Numbers – 281 • *Configure TeX Coloring* – 281
Convert to ASCII – 281 • *Educate Quotes* – 282 • *Hex Dump* – 282
Prefix/Suffix Lines – 282 • *Process Duplicate Lines* – 283
Process Lines Containing – 284 • *Salary Adjust* – 285
Sort Lines – 285 • *Un/Comment* – 286
Obsolete Plug-Ins **286**
Third-Party Plug-Ins **286**
Finding More Plug-Ins – 286 • *Plug-In Compatibility* – 286
Mac OS X Plug-Ins – 287

Using BBEdit Plug-Ins

To use a BBEdit plug-in, choose its name from the Tools menu. All installed plug-ins appear in that menu. Some plug-ins require that there be an active window or a selection range. These tools may be dimmed when this condition is not met.

new in 7.0 The Plug-In Info command in the Apple menu (on Mac OS 9) or the BBEdit menu (on Mac OS X) displays a window listing all installed plug-ins and their version numbers. The Help and Web Site buttons at the bottom of the window are enabled when there is online help or a Web page available, respectively, about the selected plug-in.

new in 7.0.2 The factory-supplied plug-ins are now contained within the BBEdit application. Third-party BBEdit plug-ins are still stored in the Plug-ins folder of the BBEdit Support folder. (See "Plug-Ins" on page 13.)

Installing Plug-Ins

To install a plug-in, drag and drop it directly onto the BBEdit application icon in the Finder. BBEdit will launch, if necessary, and present an alert asking you to confirm that you want to install the plug-in. If there is already a plug-in with the same name in your Plug-Ins folder, you will be further prompted whether to replace it with the version you are dragging. If you confirm the operation, the plug-in you dragged will be placed at the top level of your Plug-Ins folder and the one it replaced will be moved to the Trash. You will need to quit and relaunch BBEdit in order to use the newly installed plug-in.

Note When installing a plug-in, if there is no BBEdit Support folder available, an appropriate folder will be created in ~/Library/Application Support/ (on Mac OS X), or in the same folder as the BBEdit application (on Mac OS 9).

The Tools Menu and Floating Window

The floating Tools window can be displayed by choosing Plug-In Tools from the Palettes submenu of the Window menu. Any plug-ins you have installed will appear both in this Tools window and in the Tools menu itself. Names that are too long to fit within the width of the window are truncated with ellipses (…).

new in 7.0 "Hovering" the mouse over such a truncated name displays a tool tip showing the full name. If you hold down the Option key, the tool tip will appear instantly, with no hovering delay. Names that fit entirely within the window without truncation do not display a tool tip.

Any plug-ins you place directly in the Plug-Ins subfolder of the BBEdit Support folder will appear as individual items in the Tools menu. If you place them in subfolders within the main Plug-Ins folder, they will appear in submenus of the Tools menu that mirror this subfolder structure. In the Tools window, such subfolders will appear as separate sublists; plug-ins located at the top level of the Plug-Ins folder will appear in the sublist named Plug-Ins.

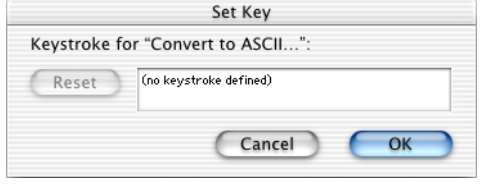
The Set Key Button

The Set Key button in the BBEdit Tools floating window lets you assign key equivalents to a plug-in. You can use any combination of the Command, Shift, Option, and Control keys in the key equivalents.

Assigning a Key to a BBEdit Tool

To assign a key to a BBEdit plug-in:

1. **Select the tool you wish to assign a key equivalent to in the Tools palette.**
2. **Click the Set Key button to display the Set Key dialog.**



3 **Type the key equivalent.**

You can use any key combined with Command plus Shift, Option, or Control modifiers if desired. The equivalent must use at least the Command or the Control modifier key to be valid. You can also use Function keys, with or without additional modifiers.

4 **Click Save.**

Warning If you try to assign a key sequence that is already used elsewhere, BBEdit will warn you that there is a conflict and ask you whether you want to reassign that key sequence to the new item.

Removing a Key Assignment

To remove a key assignment from a BBEdit plug-in:

1 **Choose the Tool from the Tools palette.**

2 **Click Set Key.**

3 **BBEdit opens the Set Key dialog.**

4 **Click Reset.**

BBEdit removes the key assignment from the plug-in.

Supplied Plug-Ins

This section describes the standard BBEdit plug-ins installed with BBEdit.

Add/Remove Line Numbers

The Add/Remove Line Numbers plug-in applies or removes line numbers to each line of the text in the active window or in the selection.

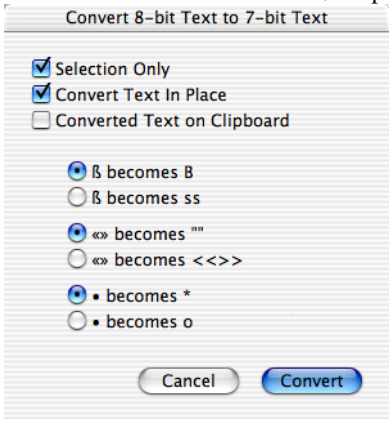
Configure TeX Coloring

The Configure TeX Coloring plug-in brings up a dialog box that allows you to choose whether math strings should be colored in TeX documents. (The factory default is for these strings not to be colored.)

Convert to ASCII

The Convert to ASCII plug-in converts all eight-bit Macintosh characters in the active window to their 7-bit ASCII equivalents. This plug-in is useful for preparing text for an email message, or for posting to an information service that does not handle 8-bit characters.

When chosen from the Tools menu, it opens this dialog box:



The checkboxes at the top of the dialog box determine what action the plug-in takes. You can choose whether to convert only the selected text (if there is a selection in the active window), whether to convert the text right in the window, and whether to also place the results on the clipboard.

The radio buttons in the dialog provide options for converting the specified 8-bit characters to their ASCII equivalents. This plug-in also automatically converts typographer's quotes (“ ” and ‘ ’) to straight quotes (" and ').

This plug-in was originally written by Jamie McCarthy, based on a prototype “Prepare Usenet Posting” plug-in by Rich Siegel.

Note This plug-in can be used to reverse the effects of the Educate Quotes plug-in.

Educate Quotes

The Educate Quotes plug-in converts straight quotes (" and ') to typographer's quotes (“ ” and ‘ ’) in the text of the active window.

Note You should not use this plug-in to prepare text for posting on a web page or use in an email, as typographer's quotes in the Mac character set will generally not be properly displayed by applications on other platforms.

Hex Dump

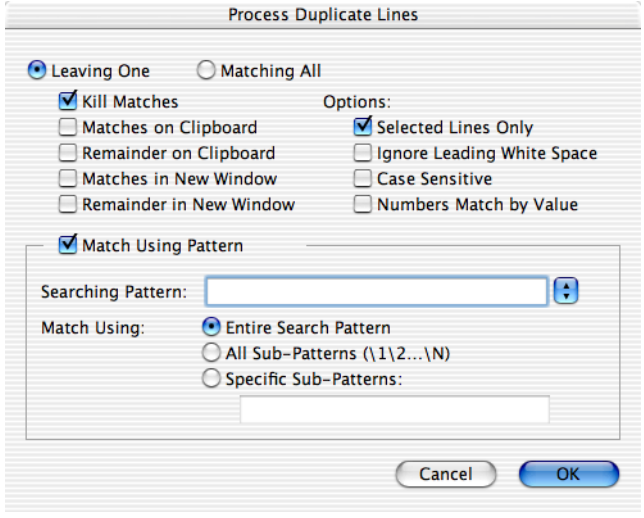
The Hex Dump plug-in provides a hex dump for a file that you choose.

Prefix/Suffix Lines

The Prefix/Suffix Lines plug-in adds or removes a prefix from all the lines of the text of the active window or of the selected text.

Process Duplicate Lines

new in 7.0 The Process Duplicate Lines plug-in locates duplicate lines within a body of text and operates on them in some way, as specified in the Process Duplicate Lines dialog:



The Matching All option processes all duplicate lines; Leaving One ignores the first of each set of duplicate lines and processes only the additional ones. If Selected Lines Only is checked, the operation will be limited to the contents of the current selection; if not, it will be applied to the entire document.

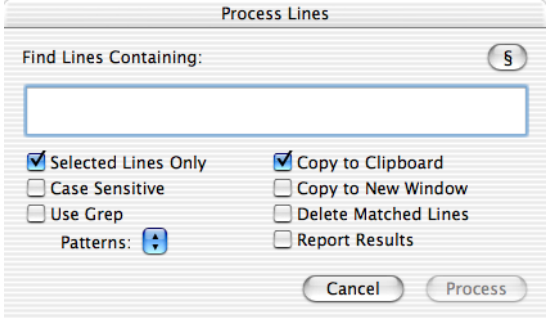
The options at the bottom of the dialog, beginning with Match Using Pattern, allow you to use a grep pattern to further filter the lines to be processed. Additional options specify that white space at the beginning of lines is to be ignored, that case distinctions are to be taken into account, and that strings of digits are to be evaluated numerically rather than treated simply as lexical strings.

Important When you use a grep pattern with this plug-in, matches are not automatically anchored to line boundaries, so ambiguous patterns may produce unpredictable results. To avoid this problem, you should use the line start ^ and line end operators as necessary.

You can delete the duplicate lines from the original document (Kill Matches), copy them to the clipboard (Matches on Clipboard) or to a new untitled window (Matches in New Window), or do the same with the lines that are *not* duplicated (Remainder on Clipboard, Remainder in New Window). Since each of these options is an independent checkbox, you can select any combination of them that you wish. For example, selecting both Kill Matches and Matches on Clipboard would delete the duplicate lines from the document and copy them to the clipboard for pasting elsewhere.

Process Lines Containing

new in 7.0 The Process Lines Containing plug-in searches the active window for lines containing a specified search string and then removes those lines or copies them to the clipboard. The options on the left side of the dialog box control how the search is performed and the options on the right side control what happens to the lines that are found.



To specify a search pattern, enter it in the Find Lines Containing text field. To process only the lines in the current selection, select Selected Lines Only. If you do not want BBEdit to match text when the letters in the text differ from the letters in the search string only by case (upper-case versus lower-case), select Case Sensitive.

To search using a grep pattern, select Use Grep and enter the pattern in the text field. You can also select a predefined search pattern from the Patterns pop-up menu or click the "grab selection" (§) button to use the current selection as the search pattern.

Note If the selection ends in a trailing carriage return, the carriage return will be omitted from the search string copied into the text field.

The checkboxes on the right of the dialog control the way lines containing the specified search pattern will be processed. By selecting the appropriate combinations of these options, you can achieve the effect of applying various editing commands to each line:

- Setting both Copy to Clipboard and Delete Matched Lines on is equivalent to applying the Cut command.
- Setting Copy to Clipboard on and Delete Matched Lines off is equivalent to applying the Copy command.
- Setting Copy to Clipboard off and Delete Matched Lines on is equivalent to applying the Clear command.

The Copy to New Window option opens a new, untitled window containing copies of all lines matching the search pattern, whether or not they are deleted from the original window. You can use this option, together with turning Copy to Clipboard off, to collect all of the matching lines without affecting the previous contents of the clipboard.

The Report Results option tells the plug-in to report the total number of lines matched, regardless of their final disposition. With all of the other options turned off, this can be useful for pretesting the extent of a search operation without affecting the clipboard or the contents of the original window.

Note The plug-in requires that at least one of these four options be turned on. If you turn off the first three options, the fourth (Report Results) will be turned on automatically.

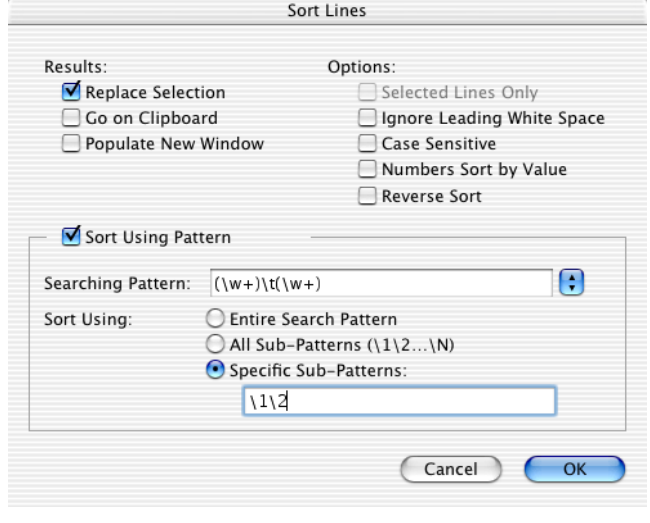
Salary Adjust

The Salary Adjust plug-in directs your payroll service to adjust your gross salary by the amount you specify, in minimum increments of 10 units of your local currency. You must have an Internet connection to use this plug-in.

Sort Lines

new in 7.0 The capabilities of the Sort Lines plug-in have been greatly expanded in BBEdit 7.0. This plug-in sorts lines of text by collating them in alphanumeric order. It can operate either on the contents of the current selection or on the whole document. The results can be copied to the clipboard, replace the selection within the original document, be displayed in a new untitled window, or any combination of the three.

There are also options for ignoring white space at the beginning of lines, taking case distinctions into account, sorting strings of digits by numerical value instead of lexically, and sorting in descending rather than ascending order.



By checking the Sort Using Pattern option, you can specify a grep pattern to further filter the lines to be sorted. If the pattern contains subpatterns, you can use them to control the sort order based on the contents of the strings they match.

For example, suppose you are sorting a list of cities together with their two-letter state abbreviations, separated by a tab character. The pattern and subpatterns shown in the figure will sort the results first by city name and second by state abbreviation. Changing the contents of the Specific Sub-Patterns field from "\1\2" to "\2\1" will instead sort the results by state first and by city second.

Important When you use a grep pattern with this plug-in, matches are not automatically anchored to line boundaries, so ambiguous patterns may produce unpredictable results. To avoid this problem, you should use the line start ^ and line end operators as necessary.

Un/Comment

The Un/Comment plug-in automates the task of commenting and uncommenting sections of code in various programming languages. Use the companion Un/Comment Settings plug-in to set up the comment strings for the supported languages.

Obsolete Plug-Ins

The Columnize, Concatenate, Machine Info, Make Prototypes, Reverse Lines, Send PostScript, and VOODOO Shim plug-ins are no longer part of the distribution package.

You can use the Insert File Contents command in BBEdit 7.0.2, which allows selection of multiple files, to perform the same function formerly provided by the Concatenate plug-in (see page 71).

The capabilities formerly provided by the Tools menu commands Cut/Copy/Clear Lines Containing have now been subsumed by the Process Lines Containing plug-in (see page 284).

Third-Party Plug-Ins

In addition to the standard plug-ins described above, a wide variety of BBEdit plug-ins are available from third parties.

Finding More Plug-Ins

An extensive though not exhaustive listing of plug-ins is available in the support section of the Bare Bones Software web site:

```
http://www.barebones.com/support/plugins.html
```

Plug-In Compatibility

WARNING Any third-party plug-in which does not present a floating palette, and does not explicitly include support for multi-byte text will be disabled if the front document window contains multi-byte (or Unicode) text. However, BBEdit *cannot* determine whether plug-ins that do present floating palettes are capable of safely processing multi-byte text, and will *not* disable them, so you should exercise caution when using such plug-ins on multi-byte text. (It is unlikely that you will crash the program, but your text may be corrupted or scrambled.)

Mac OS X Plug-Ins

IMPORTANT When running on Mac OS X, you will *not* be able to use any third-party plug-ins which have not been specifically updated for Mac OS X compatibility. Contact the developers of your plug-ins or visit the Bare Bones Software web site (see below) for more information on the availability of updated plug-ins.

`http://www.barebones.com/support/bbedit/plugin_library.shtml`

APPENDIX

A

Command Reference

This appendix provides a quick reference for key assignments and a comprehensive list of the commands that are available from BBEdit's user interface.

In this appendix

Keyboard Shortcuts for Commands **289**
Assigning Keys to Menu Commands **290**
Available Key Combinations – 290
Listing by Menu and Command Name **291**
Listing by Default Key Equivalents **298**

Keyboard Shortcuts for Commands

Many of BBEdit's commands have pre-defined keyboard shortcuts. BBEdit also lets you reassign the shortcuts for any menu command, glossary entry, plug-in, or script to suit your own way of working.

To change the keyboard shortcut for any menu command, you can use the Set Menu Keys command. (See "Assigning Keys to Menu Commands" on the following page.)

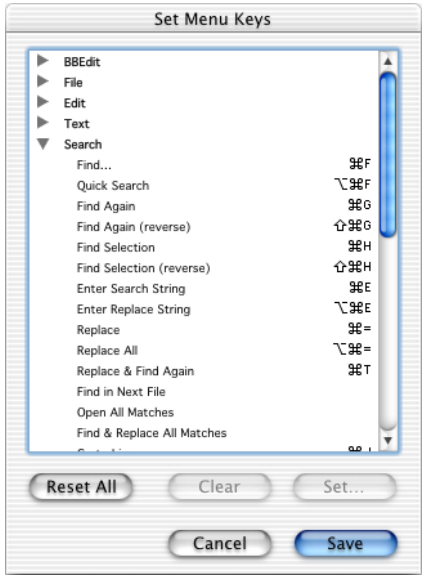
Many other BBEdit features can have keyboard shortcuts assigned as well. Here's how to set them:

Feature	Set Keys in…
Menu commands	Set Menu Keys (BBEdit menu on Mac OS X, Edit menu on Mac OS 9)
Plug-ins	Plug-In Tools palette
Glossary items	Glossary palette
Scripts	Scripts palette
Perl/Unix filters and scripts	Perl/Unix Filters and Scripts palettes
Stationery	Stationery palette

To display any of BBEdit's floating palette windows, use the Palettes submenu in the Window menu.

Assigning Keys to Menu Commands

You can assign your own keyboard shortcuts (key equivalents) to any of BBEdit's menu commands by choosing Set Menu Keys from the Edit menu on Mac OS 9, or the BBEdit (Application) menu on Mac OS X. The Set Menu Keys dialog, below, appears.



To set the key equivalent for a menu command, find it in the Set Menu Keys dialog, click the Set button, and type the desired keystroke.

To remove the key equivalent from the selected menu command, click the Clear button.

Click the Reset All button to restore all key equivalents to their default values (as listed in this Appendix).

Available Key Combinations

All menu key combinations must include either the Command key or the Control key (or both), except function keys, which may be used unmodified. Additionally, the key combinations Command-0 through Command-9 are reserved for file entries on the Window menu. There may also be other key combination which the operating system preempts, such as Command-Tab on Mac OS X.

new in 7.0.2 The Help, Home, End, Page Up and Page Down keys can now be used in menu key combinations as well. The Help key can be assigned without modifiers; the others must be used in combination with at least either the Command or Control key.

Listing by Menu and Command Name

Apple Menu *(Mac OS 9 only)*

About BBEdit

BBEdit Menu *(Mac OS X only)*

About BBEdit
Plug-In Info
Preferences Cmd-;
Set Menu Keys…
Services *(submenu)*
Hide BBEdit (*none or* Cmd-H)
Hide Others
Show All
Quit BBEdit Cmd-Q

File

New *(see next column)*
New With Stationery *(submenu)*
Open… Cmd-O
Open Hidden…
Open from FTP Server… Cmd-Shift-O
Open Selection Cmd-D
Open File by Name… Cmd-D
Reveal Selection Cmd-Opt-D
Open Recent *(submenu)*
Close Cmd-W
Close All Windows Cmd-Opt-W
Close All Documents Cmd-Opt-Shift-W
Close & Delete Cmd-Shift-W
Save Cmd-S
Save All Cmd-Opt-S
Save As…
Save As Selection… (Opt)
Save a Copy…
Save to FTP Server… Cmd-Shift-S
Save a Copy to FTP Server… Cmd-Opt-Shift-S
Revert…
Revert (Opt)
Backup Options…
Make Backup Now…
Page Setup…
Print… Cmd-P
Print All Cmd-Opt-P
Print One Copy Cmd-Shift-P
Quit *(Mac OS 9)* Cmd-Q

File --> New

Text Document Cmd-N
  (with selection) Cmd-Shift-N
  (with Clipboard) Cmd-Opt-Shift-N
HTML Document… Cmd-Ctl-N
File Group
Disk Browser Cmd-Opt-N
FTP Browser
Shell Worksheet *(OS X)*
Shell Worksheet…*(OS X)*

Edit

Undo Cmd-Z
Redo Cmd-Shift-Z
Cut Cmd-X
Cut & Append Cmd-Shift-X
Copy Cmd-C
Copy & Append Cmd-Shift-C
Paste Cmd-V
Paste Previous Clipboard Cmd-Shift-V
Clear
Select All Cmd-A
Select None Cmd-Shift-A
Select Line Cmd-L
Select Paragraph Cmd-Opt-L
Insert *(see below)*
Auto-Complete Glossary…
Insert Glossary Entry…
Show Clipboard
Previous Clipboard Ctl-[
Next Clipboard Ctl-]
Text Options… Cmd-Opt-;
Printing Options… Cmd-Shift-;
Preferences *(Mac OS 9)* Cmd-;
Set Menu Keys… *(Mac OS 9)*

Edit --> Insert

File Contents…
File Path…
Folder Listing…
Folder Path…
Toolbox Call Template
Page Break

Text

Font & Tabs…	
Balance	Cmd-B
Exchange Characters	Cmd-`
Exchange Words	Cmd-Opt-`
Change Case…	
Change Case	(Opt)
Shift Left	Cmd-[
Shift Left One Space	Cmd-Shift-[
Shift Right	Cmd-]
Shift Right One Space	Cmd-Shift-]
Hard Wrap…	Cmd-\
Hard Wrap	Cmd-Opt-\
Add Line Breaks	
Remove Line Breaks	
Rewrap Quoted Text…	Cmd-'
Rewrap Quoted Text	Cmd-Opt-'
Increase Quote Level	Cmd-Opt-]
Decrease Quote Level	Cmd-Opt-[
Strip Quotes	
Zap Gremlins…	
Zap Gremlins	(Opt)
Entab…	
Entab	(Opt)
Detab…	
Detab	(Opt)
Resolve URL	
Check Spelling…	

Font

(font sizes)
(installed fonts)

Tools

(Installed plug-ins)	(none by default)

Search

Find…	Cmd-F
Quick Search	Cmd-Opt-F
Find Again	Cmd-G
Find Again (reverse)	Cmd-Shift-G
Find Selection	(Cmd-H *or none*)
Find Selection (reverse)	Cmd-Shift-H
Enter Search String	Cmd-E
Enter Replace String	Cmd-Opt-E
Replace	Cmd-=
Replace All	Cmd-Opt-=
Replace & Find Again	Cmd-T
Find In Next File	
Open All Matches	
Find & Replace All Matches	
Go to Line…	Cmd-J
Go to Line	Cmd-Opt-J
Go to Center Line	Cmd-Shift-J
Go to Previous Error	Cmd-Opt–up arrow
Go to Next Error	Cmd-Opt–dn arrow
Go to Previous Placeholder	Ctl-Shift-'
Go to Next Placeholder	Ctl-'
Find Differences…	
Apply to New	Cmd–left arrow
Apply to Old	Cmd–right arrow
Compare Again	
Find in Reference…	Cmd--
Find Definition…	Cmd-Opt--

Markup

(see following pages)

Window

Minimize Window *(OS X)*	
Minimize All Windows *(OS X)*	(Opt)
Bring All to Front *(OS X)*	
Palettes	(*see next page)*
Arrange…	
Get In	
Arrange	(Opt)
Get Info	
Super Get Info *(Mac OS X)*	(Opt)
Reveal in Finder	
Send To Back	Cmd-Ctl-/
Exchange With Next	
Synchro Scrolling	
(Open windows)	Cmd-1 *to* Cmd-0

Window --> Palettes

ASCII Table
Glossary
Plug-In Tools
Scripts
Stationery
Windows
HTML Markup Tools
  Block
  CSS
  Entities
  Font Style
  Forms
  Inline
  Phrase
  Table
  Utilities
  Web Safe Colors
Perl/Unix Tools
Perl/Unix Filters
Perl/Unix Scripts

MacPerl *(Mac OS 9 only)*

Open MacPerl	
Open Shuck	
Check Syntax	
Check Selection Syntax	(Opt)
Run	
Run…	(Opt)
Run in MacPerl	
Run in Debugger	
Run File…	
Export To	*(submenu)*
CGI Script…	
Droplet…	
Runtime…	
Find in Perl Reference…	
View POD	
Perl Filters	*(submenu)*
Perl Scripts	*(submenu)*

CVS *(Mac OS X only)*

Get Revision…	
Update File…	
Update File	(Shift)
Update Folder…	
Commit File…	
Commit File	(0pt)
Commit Folder…	
Commit Parent Folder…	
Commit Parent Folder	(Opt)
Find Lurkers…	
Compare Arbitrary Revisions	
Get Revision History…	
Get CVS Status…	
Add…	
Remove…	
Go to Previous Conflict	
Go to Next Conflict	
Export Project	
Open Log File	

Shebang (#!) *(Mac OS X only)*

Check Syntax	
Check Selection Syntax	(Opt)
Run	
Run…	(Opt)
Run in Terminal	
Run in Debugger	
Run File…	
Find in Reference…	
View POD	
Unix Filters	*(submenu)*
Unix Scripts	*(submenu)*

Compiler

CodeWarrior IDE	
Absoft Tools	
Compile	Cmd-K
Check Syntax	Cmd-Y
Debug	Cmd-I
Set Breakpoint	Cmd-Shift-I
Set Breakpoint & Go	Cmd-Opt-Shift-I
Add	
Add & Compile	
Precompile…	
Preprocess	
Bring Up To Date	Cmd-U
Make	
Debug	Cmd-R
Run	Cmd-Opt-R

Projector

Check In…	
Check Out…	
Modify Read-Only	
Modify Read-Only…	(Opt)
Get Revision…	
Cancel Check Out	
Cancel Check Out/MRO…	(Opt)
Edit Task Comment…	
Edit Task Comment in FIle…	(Opt)
Compare Revisions…	
Get Revision History…	
New Project…	
Check In Folder…	
Check Out Folder…	
Find Lurkers	
Make Obsolete	
Make Obsolete…	(Opt)
Remove Projector Info	
Remove Projector Info…	(Opt)
Open Log File	

Scripts

Open Script Editor
Open Scripting Dictionary
Start/Stop Recording
(Installed scripts)

Markup

Tag Maker…	Cmd-M
Edit Tag…	Cmd-Opt-M
Close Current Tag	
Balance Tags	Cmd-Opt-B
Document Type…	
Character Set…	
CSS	*(see below)*
Body Properties…	
Head Elements	*(see below)*
Block Elements	*(see next column)*
Lists	*(see next column)*
Tables	*(see page 295)*
Forms	*(see page 295)*
Inline	*(see page 295)*
Phrase Elements	*(see page 295)*
Font Style Elements	*(see page 296)*
Frames	*(see page 296)*
Check	*(see page 296)*
Update	*(see page 296)*
Includes	*(see page 296)*
Utilities	*(see page 297)*
Misc	*(see page 297)*
Preview	Cmd-Ctl-P
Preview in New Window	
Preview With	*(see page 297)*

Markup --> CSS

@import…
Box…
  Padding…
  Border…
  Margins…
Background…
Font…
Text…
Format

Markup --> Head Elements

Base…
Link…
Meta…
Script…
Noscript
Style…
Format

Markup --> Block Elements

Paragraph…	
Paragraph	(Opt)
Div…	
Horizontal Rule…	
Horizontal Rule	(Opt)
Heading…	Cmd-Ctl-H
H1	
H2	
H3	
H4	
H5	
H6	
Address	
Blockquote…	
Center	
Deleted Text…	
Inserted Text…	
Noscript	
Preformatted	

Markup --> Lists

List…	Cmd-Ctl-L
Unordered	
Ordered	
Definition	
Menu	
Directory	
List Item	
List Items	

Markup --> Tables

Table…	Cmd-Ctl-T
Row…	
Row	(Opt)
TD…	
TD	(Opt)
TH…	
TH	(Opt)
Caption	
Colgroup…	
Col…	
THead…	
TFoot…	
TBody…	
Convert to Table…	

Markup --> Forms

Form…	
Button…	
Field Set	
Legend…	
Input…	
Label…	
Select…	
Option Group…	
Option…	
Text Area…	

Markup --> Inline

Anchor…	Cmd-Ctl-A
Image…	Cmd-Ctl-I
Applet…	
Object…	
Param…	
Script…	
Map…	
Area…	
Convert to Client Side Map…	
Break…	Cmd-Ctl-B
Break	
Font…	Cmd-Ctl-F
Base Font…	
Bidirectional Override…	
Quotation	
Span…	
Subscript	
Superscript	

Markup --> Phrase Elements

Abbreviation
Acronym
Citation
Computer Code
Deleted Text…
Defined Term
Emphasis
Inserted Text…
Input Text (Kbd)
Sample Output
Strong Emphasis
Variable

Markup --> Font Style Elements

Big
Small
Bold
Italic
Strike-Through
Teletype Text
Underline

Markup --> Frames

Frame Set…
Frame…
No Frames

Markup --> Check

Document Syntax	Cmd-Ctl-Y
Document Links	Cmd-Ctl-K
Folder Syntax…	
Folder Links…	
Site Syntax…	
Site Syntax	(Opt)
Site Links…	
Site Links	(Opt)

Markup --> Update

Document	Cmd-Ctl-U
Folder…	
Site…	
Site	(Opt)
Document Images…	
Document Images	(Opt)
Folder Images…	
Site Images…	
Site Images	(Opt)

Markup --> Includes

Persistent Include…
Include…
Placeholders…

Markup --> Utilities

Format…	Cmd-Opt-Shift-F
Format	
Optimize	
Translate…	Cmd-Opt-T
Remove Comments	
Remove Markup	
Comment	
Uncomment	
Normalize Tag Case	
Make Tags Upper Case	
Make Tags Lower Case	

Markup --> Misc

Dreamweaver	
Document Size	
Index Document	
Index Folder…	
Index Site…	Cmd-Ctl-X
GoLive Cleaner	
HomePage Cleaner	
PageMill Cleaner	

Markup --> Preview With

Preview as Text	
in All Running Browsers	
(Installed browsers)	

Listing by Default Key Equivalents

Key	Command
Cmd-1 *to* Cmd-0	Window: *(Open windows)*
Cmd-A	Edit: Select All
Cmd-B	Text: Balance
Cmd-C	Edit: Copy
Cmd-D	File: Open Selection File: Open File by Name
Cmd-E	Search: Enter Search String
Cmd-F	Search: Find…
Cmd-G	Search: Find Again
Cmd-H	Search: Find Selection *or* BBEdit: Hide BBEdit *(Mac OS X)*
Cmd-I	CodeWarrior: Debug
Cmd-J	Search: Go to Line…
Cmd-K	CodeWarrior: Compile
Cmd-L	Edit: Select Line
Cmd-M	Markup: Tag Maker…
Cmd-N	File: New: Text Document
Cmd-O	File: Open…
Cmd-P	File: Print…
Cmd-Q	BBEdit: Quit BBEdit *(Mac OS X)* *or* File: Quit *(Mac OS 9)*
Cmd-R	CodeWarrior: Debug
Cmd-S	File: Save
Cmd-T	Search: Replace & Find Again
Cmd-U	CodeWarrior: Bring Up To Date
Cmd-V	Edit: Paste
Cmd-W	File: Close
Cmd-X	Edit: Cut
Cmd-Y	CodeWarrior: Check Syntax
Cmd-Z	Edit: Undo

Key	Command
Cmd-’	Text: Rewrap Quoted Text…
Cmd--	Search: Find in Reference…
Cmd-;	BBEdit: Preferences *(Mac OS X)* Edit: Preferences *(Mac OS 9)*
Cmd-[	Text: Shift Left
Cmd-]	Text: Shift Right
Cmd-`	Text: Exchange Characters
Cmd-/	Zoom Window
Cmd-=	Search: Replace
Cmd-\	Text: Hard Wrap…
Cmd–left arrow	Search: Apply to New
Cmd–right arrow	Search: Apply to Old
Cmd-Ctl-A	Markup: Inline: Anchor…
Cmd-Ctl-B	Markup: Inline: Break…
Cmd-Ctl-F	Markup: Inline: Font…
Cmd-Ctl-H	Markup: Block Elements: Heading…
Cmd-Ctl-I	Markup: Inline: Image…
Cmd-Ctl-K	Markup: Check: Document Links
Cmd-Ctl-L	Markup: Lists: List…
Cmd-Ctl-N	File: New: HTML Document…
Cmd-Ctl-P	Markup: Preview
Cmd-Ctl-T	Markup: Tables: Table…
Cmd-Ctl-U	Markup: Update: Document
Cmd-Ctl-X	Markup: Misc: Index Site…
Cmd-Ctl-Y	Markup: Check: Document Syntax
Cmd-Ctl-/	Window: Send To Back
Cmd-Opt-B	Markup: Check: Balance Tags
Cmd-Opt-D	File: Reveal Selection
Cmd-Opt-E	Search: Enter Replace String
Cmd-Opt-F	Search: Quick Search

Key	Command
Cmd-Opt-J	Search: Go to Line
Cmd-Opt-L	Edit: Select Paragraph
Cmd-Opt-M	Markup: Edit Tag…
Cmd-Opt-N	File: New: Disk Browser
Cmd-Opt-P	File: Print All
Cmd-Opt-R	CodeWarrior: Run
Cmd-Opt-S	File: Save All
Cmd-Opt-T	Markup: Utilities: Translate…
Cmd-Opt-W	File: Close All Windows
Cmd-Opt-'	Text: Rewrap Quoted Text
Cmd-Opt--	Search: Find Definition…
Cmd-Opt-;	Edit: Text Options…
Cmd-Opt-`	Text: Exchange Words
Cmd-Opt-[	Text: Decrease Quote Level
Cmd-Opt-]	Text: Increase Quote Level
Cmd-Opt-/	Zoom Window Full Screen
Cmd-Opt-=	Search: Replace All
Cmd-Opt-\	Text: Hard Wrap
Cmd-Opt–down arrow	Search: Go to Next Error
Cmd-Opt–up arrow	Search: Go to Previous Error
Cmd-Opt-Shift-F	Markup: Utilities: Format…
Cmd-Opt-Shift-I	CodeWarrior: Set Breakpoint & Go
Cmd-Opt-Shift-N	File: New: (with Clipboard)
Cmd-Opt-Shift-S	File: Save a Copy to FTP Server…
Cmd-Opt-Shift-W	File: Close All Documents
Cmd-Shift-A	Edit: Select None
Cmd-Shift-C	Edit: Copy & Append
Cmd-Shift-G	Search: Find Again (reverse)
Cmd-Shift-H	Search: Find Selection (reverse)
Cmd-Shift-I	CodeWarrior: Set Breakpoint
Cmd-Shift-J	Search: Go to Center Line

Key	Command
Cmd-Shift-N	File: New: (with selection)
Cmd-Shift-O	File: Open from FTP Server…
Cmd-Shift-P	File: Print One Copy
Cmd-Shift-S	File: Save to FTP Server…
Cmd-Shift-V	Edit: Paste Previous Clipboard
Cmd-Shift-W	File: Close & Delete
Cmd-Shift-X	Edit: Cut & Append
Cmd-Shift-Z	Edit: Redo
Cmd-Shift-;	Edit: Printing Options…
Cmd-Shift-[	Text: Shift Left One Space
Cmd-Shift-]	Text: Shift Right One Space
Ctl-'	Search: Go to Next Placeholder
Ctl-Shift-'	Search: Go to Previous Placeholder
Ctl-Tab	Switch to Header/Source File
Ctl-[	Edit: Previous Clipboard
Ctl-]	Edit: Next Clipboard

APPENDIX

B

Editing Shortcuts

In BBEdit you can perform many editing functions (including word selection or deletion) directly from the keyboard. Chapter 4 contains complete details on BBEdit's text editing features. This appendix provides a quick reference to available keyboard and mouse shortcuts for word selection and deletion.

In this appendix

Mouse Commands **303**
Arrow and Delete Keys **304**
Emacs Key Bindings **305**
Using universal-argument – 306

Mouse Commands

	No Modifier	Shift
Click	move insertion point	extend selection
Double-click	select word	extend selection to word
Triple-click	select line	

Triple-clicking is the same as clicking in a line and then choosing the Select Line command from the Edit menu.

Holding down the Command and Option keys as you click or double-click triggers special actions:

	Option	Command	Command/Option
Click		Open URL	
Double-click	look up selected word in programming reference		select word and search for next occurrence of the word

Arrow and Delete Keys

You can use the arrow keys to move the insertion point right, left, up, and down. You can augment these with the Command and Option keys to move by word, line, or screens, or with the Shift key to create or extend selections. For example, pressing Shift-Option-Right Arrow selects the word to the right of the insertion point.

You can hold down the Control key while using the arrow keys to scroll through editing windows without moving the position of the insertion point.

Key	Modifier	Action
(left/right) Arrow		Move 1 character left/right
(left/right) Arrow	Option	Move 1 word left/right
(left/right) Arrow	Command	Move to beginning/end of line
(left/right) Arrow	Control	Scroll view left/right
(up/down) Arrow		Move up/down 1 line in file
(up/down) Arrow	Command	Move to top/bottom of file
(up/down) Arrow	Option	Move to previous/next screen page
(up/down) Arrow	Control	Scroll view up/down
[any of the above]	Shift	Make or extend a selection range
Delete		Deletes selection range, or character preceding (to the left of) the insertion point.
Delete	Command	Deletes all characters backwards to beginning of line
Delete	Option	Deletes all characters back to beginning of word
Delete	Shift	(same as Forward Delete)
Forward Delete		Deletes selection range, or character after (to the right of) the insertion point
Forward Delete	Command	Deletes all characters forward to end of the current line
Forward Delete	Option	Deletes all characters forward to end of word
Forward Delete	Shift	(same as Forward Delete alone)

Note The meaning of the Command and Option modifiers listed above may be exchanged, depending on which settings you have selected for Exchange Command and Option Key Behavior in the Text Editing panel of the Preferences window.

Emacs Key Bindings

The Text Editing panel of the Preferences window contains a checkbox labeled Use Emacs Key Bindings. When this option is turned on, BBEdit will enable the following Emacs-style keyboard navigation commands. The Escape key is specified in lieu of the Emacs "Meta" key; to use these key equivalents, press and release the Escape key followed by the specified letter key—for example, to type "Esc-V" press and release the Escape key and then type the letter V.

Key Sequence	Action
Ctl-A	beginning-of-line (Move insertion point to start of current line)
Ctl-B	backward-char (Move insertion point backward 1 place)
Ctl-D	delete-char (Delete forward 1 character)
Ctl-E	end-of-line (Move insertion point to end of current line)
Ctl-F	forward-char (Move insertion point forward 1 place)
Ctl-G	keyboard-quit (cancel pending arguments)
Ctl-K	kill-line (Delete to end of current line)
Ctl-L	recenter (Scrolls the current view so the selection is centered on screen)
Ctl-N	next-line (Move insertion point down one line)
Ctl-O	open-line (Inserts line break without moving insertion point)
Ctl-P	previous-line (Move insertion point to start of line above current)
Ctl-R	isearch-backward (Quick Search with the Backwards option)
Ctl-S	isearch-forward (Quick Search)
Ctl-T	transpose-chars (Exchange Characters)
Ctl-U	universal-argument (*See note below*)
Ctl-V	scroll-up (Page down)
Ctl-W	kill-region (Cut)
Ctl-Y	yank (Paste)
Ctl-_	undo (Undo)

Key Sequence	Action
Ctl-X Ctl-C	save-buffers-kill-emacs (Quit)
Ctl-X Ctl-F	find-file (Open file)
Ctl-X Ctl-S	save-buffer (Save current document)
Ctl-X Ctl-W	write-file (Save As)
Esc-<	beginning-of-buffer (Move insertion point to start of document)
Esc->	end-of-buffer (Move insertion point to end of document)
Esc-Q	fill-paragraph (Hard Wrap with current settings)
Esc-V	scroll-down (Page up)
Esc-W	copy-region-as-kill (Copy)
Esc-Y	yank-pop (Paste Previous Clipboard)

new in 7.0 The "yank-pop" action, corresponding to the Paste Previous Clipboard command, is new for this version of BBEdit.

Using universal-argument

The universal-argument command (Ctl-U) does not work quite the same way as it does in Emacs. In BBEdit, it is a simple repeat-count. For example, if you type Ctl-U, then a 3, and then Ctl-N, the insertion point will move down three lines. There is no visual feedback as you type the number, and no way to backspace or otherwise edit the number. If you make a mistake, the best you can do is type Ctl-G (keyboard-quit) and start over.

APPENDIX

C

Placeholders and Include Files

This appendix lists the placeholder tokens used by BBEdit templates and include files, and describes the use and capabilities of include files.

In this appendix

Placeholders **307**
Using the #RELATIVE# Placeholder – 310
Include Files **311**
Simple Includes – 311 • *Persistent Includes* – 311
Include Files with Variables – 312 • *Including AppleScripts* – 313
Including Perl or Python Scripts – 314 • *Other Include Notes* – 316

Placeholders

Placeholders are processed under the following circumstances:

- When a new HTML document is created from a template, the placeholders in the template are replaced with their current values. (The new document receives the substituted text; the original template file is not modified.)
- When the Update Document command (part of the HTML Tools) is invoked, any placeholders in the documents being updated are replaced with their current values. (Since the placeholders are replaced, subsequent updates *do not* update the substituted text.) Although this command is part of the HTML Tools, it can be used in any document whenever you want to use placeholders.
- When a file is included in another file using the #bbinclude directive (or a related directive), any placeholders in the included file are replaced with their current values before the text is included. (The include file itself is not changed, only the included text is substituted.) All of the above methods of invoking placeholders can also invoke included files, which can have placeholders of their own.

Note The placeholders described in this chapter are only available for use with the HTML Tools' Update command. They cannot be used with BBEdit's Glossary command, nor can Glossary placeholders be used in include or template files.

BBEdit supports the following placeholders. Placeholders are not case-sensitive.

Placeholder	Replaced By…
#ABBREVDATE#	Abbreviated date—e.g., Sun, Oct 27, 2002
#BASE#	The BASE tag as entered using the New HTML Document command
#BASENAME#	The name of the file stripped of its rightmost period-delimited portion. For example, if the file is named “test.html”, the base name is “test”, while if the file is named “test.foo.html”, the base name is “test.foo”.
#BASE_URL#	The value of the BASE URL specified in an HTML document’s header (useful if you want to refer to the document’s location on the server)
#BODYTEXT#	When invoking a template using the New HTML Document command, and the Create New Window checkbox is not marked, the current contents of the frontmost window (if any) will replace this placeholder
#CHARSET#	The character set specified in the New HTML Document command
#COMPDATE#	Compact Date format—e.g., 27-Oct-02
#CREATIONDATE#	The creation date of the current file—e.g., 27-Oct-02
#CREATIONTIME#	The creation time of the current file, in the format specified in the Date & Time control panel
#DIRPATH#	The path on the server as specified in the HTML Web Site panel of the Preferences window. Strips any leading slash from the path string
#DOCSIZE#	The size of the current document plus included images in bytes
#DOCTITLE#	The title of the current document as extracted from the <TITLE> tag
#DONT_UPDATE#	Marks a document so that the HTML Update tool will ignore it during processing
#FILE_EXTENSION#	The filename extension for the file (determined as the rightmost period-delimited portion of the filename, without the period). For example, whether the file is named “test.html” or “test.foo.html”, the filename extension is "html".
#FILENAME#	The file name of the current file
#GENERATOR#	Generator name used for “Give BBEdit Credit” in New HTML Document function (e.g., “BBEdit 7.0”)
#IC_EMAIL#	“Email address” returned by Internet control panel
#IC_ORGANIZATION#	“Organization” value returned by Internet control panel (not available on Mac OS X)
#IC_REALNAME#	“Name” value returned by Internet control panel

Placeholder	Replaced By…
#LANGUAGE#	The language specified in the New HTML Document command, in format (space)lang="en"
#LINK#	The LINK tag as entered using the New HTML Document command
#LOCALPATH#	The full local path to the current file
#LONGDATE#	Long Date format—e.g., Sunday, October 27, 2002
#MACHINE#	The machine name as specified in the Sharing Setup or File Sharing control panel. (In Mac OS X, this returns "localhost" rather than the name specified in the Sharing panel in System Preferences. This is a bug in the OS.)
#META#	Any META tag entered using the New HTML Document command
#MODIFIEDDATE#	Modification date of the current file—e.g., 27-Oct-02
#MODIFIEDTIME#	Modification time of the current file, in the format specified in the Date & Time control panel
#MONTHDAYNUM#	Numeric value of the day of the month
#MONTHNUM#	Numeric value of the current month
#PATH#	Path to access your documents from the Web server, as specified in your HTML Web Site preferences
#PREFIX#	As #DIRPATH# but does not strip the leading slash of the path
#REAL_URL#	The real URL for the current document in its current location
#RELATIVE#	The relative path from the current file back up to the Local Server Root (inserts a path of the form "../../" to tell the browser to "back up" to the site's root directory)
#ROOT#	Path to the Local Site Root, as specified in your HTML Web Site preferences
#ROOTPATH#	The file's path relative to the Local Server Root specified in the HTML Web Site preferences to the current file
#SERVER#	URL of your Web server, as specified in your HTML Web Site preferences.
#SHORTDATE#	Short Date. Day, month, year—e.g., 07/10/01
#SHORTUSERNAME#	Returns the login (short) name instead of the full user name on Mac OS X, or the owner name (from the File Sharing control panel on Mac OS 9.
#TIME#	Current time, in the format specified in the Date & Time control panel
#TITLE#	Title of the current document as entered using the New HTML Document command

Placeholder	Replaced By…
#USERNAME#	The owner name (from the File Sharing control panel on Mac OS 9, or the currently logged in user on Mac OS X)
#YEARNUM#	The current year—e.g., 2002

Using the #RELATIVE# Placeholder

When dealing with large web sites that have multiple content folders, it is often useful to specify relative rather than absolute paths for linking documents. The #RELATIVE# placeholder allows you to easily generate relative references in templates and include files by providing a virtual path that uses the ".." construction to "back up" the hierarchy to the root directory of the site.

To use this placeholder, write your links as if they were all relative to the top of your web site, including #RELATIVE# as the first "directory" in the path. For example, consider that you have the following file structure, where each page includes a file which references the separate GIF image.

```
My_Web_Site:
    Folder1:
        File1.html
    Folder2:
        File2.html
        File3.html
    Folder3:
        Folder4:
            Folder5:
                File4.html
    Graphics:
        Buttons:
            my_footer_button.gif
```

If you write a relative link as follows:

```
<img src="#relative#Graphics/Buttons/my_footer_button.gif"
alt="">
```

and then run the Update command, the following links will be generated.

In File1.html,

```
../Graphics/Buttons/my_footer_button.gif
```

In File2.html,

```
../Graphics/Buttons/my_footer_button.gif
```

In File3.html,

```
../Graphics/Buttons/my_footer_button.gif
```

In File4.html,

```
../../../Graphics/Buttons/my_footer_button.gif
```

Include Files

An include file, or just an "include," is a special form of placeholder whose substitution happens to be the contents of another file. If you have used C or certain other programming languages, you may already be familiar with the concept. Using includes, you can reuse standard bits of text content or HTML markup in several templates or glossary entries without having to revise all of those individual files whenever you revise the included text.

Simple Includes

A simple include takes the following form:

```
#bbinclude "footer.html"
```

When such an include is used in a template or glossary entry, it is replaced with the contents of the specified file when the template is used to build a new document, or when the glossary entry is inserted. (The original template or glossary file is not changed.)

Imagine that you have ten different templates, each of which contains your name, address, phone number, email address, and a copyright statement with the current year in them. Rather than pasting this info into all ten templates, you can create a file named "address.html", put it in your Templates folder, and include this statement:

```
#bbinclude "address.html"
```

in each of the templates, at the appropriate point. Later, when the new year arrives, or you move, you only have to update one file, not all ten templates. (You could use the #YEARNUM# placeholder for the year and only need to update the include file when you move!)

Headers and footers are probably the most common uses for include files, but any template or glossary entry may use as many include statements as you wish. Included files themselves may also use #bbinclude directives, up to 16 levels deep.

Note BBEdit looks for include files first in the same directory as the document containing the directive, then in the same directory as the document into which the processed document is being inserted, and finally in the HTML Templates folder specified in your preferences.

Persistent Includes

Simple includes are appropriate for use situations where you want the inclusion to happen only once. Once the file has been included, however, it cannot be changed in any automated fashion. Since the #bbinclude directive is replaced by the included text, the Update tool cannot tell the included text is any different from any other text.

Includes become even more powerful, however, when you can update existing files to incorporate revised include text at a later date. For example, suppose you generate several dozen HTML documents using a template that uses an #bbinclude directive to insert a standard footer containing your email address. Later, you change your email address. After you change it in the footer document, only *new* HTML files you create from the template will include your new address. What you would really like to be able to do is update all the files you have *already* created to include the revised footer.

Since this capability is needed primarily in web site maintenance, BBEdit lets you embed the include directive in an HTML comment. An "end bbinclude" comment is also required. The included text is inserted *between* the two comment markers, but the comments themselves remain in place. The comments are not shown in the browser. This is known as a *persistent* include.

A persistent include looks like this:

```
<!-- #bbinclude "footer.html" -->
<!-- end bbinclude -->
```

The first time a persistent include is processed, it is handled much like a simple include. However, since the include directives remain in place, and because they mark the beginning and end of the inserted text, the Update tool can "rip out" the obsolete included text and replace it with the updated file. Using persistent includes and the Update Folder or Update Site commands, you can easily make these sorts of changes to entire sites in moments.

IMPORTANT Any changes you have made to the included text after its initial inclusion will be discarded when the persistent include is updated, even if you have not changed the include file.

Include Files with Variables

Include files can be extended even further through the use of variables, which provide a means of inserting arbitrary text when the included file is processed, so that not all instances of the included file are exactly the same. Variables are essentially placeholders that you make up yourself. Some possible uses are to insert names, taglines, alt strings for images, or file names (for files other than the current document) into documents.

Note A variable name consists of a string of alphanumeric characters, enclosed in number signs (the '#' character). Spaces are not allowed in variable names, but underscores may be used to represent word breaks.

Variables can be placed anywhere in an include file, just like placeholders. When you include that file in a document, you specify the variable names and values with it. Consider an include file named "footer.html", which contains the following

```
<HR>
<IMG SRC="#MY_GRAPHIC#" ALT="#MY_ALT_DESC#">
<H1>#MY_TITLE#</H1>
<BIG>This document copyleft 1998-2002 by Sid Zookim.</BIG>
```

In your document, the Include reference would look like this:

```
…
<BODY>
…
<!-- #bbinclude "footer.html"
#MY_GRAPHIC#="test1.gif"
#MY_ALT_DESC#="a test image"
#MY_TITLE#="A Test Title"
-->
<!-- end bbinclude -->
…
</BODY>
…
```

Note that the values of placeholders are specified *inside* the HTML comment of a persistent include, using a #PLACEHOLDER#="Value" syntax. The quote marks around the value are mandatory; if you need to include a quote mark in the actual value, escape it with a backslash.

Including AppleScripts

BBEdit allows included files to be compiled AppleScript scripts. The script should contain an "on include" handler which is passed two parameters: a reference to the file from which the script is being called, and a record containing one field for each variable passed in the #bbinclude directive. Scripts can of course also retrieve information from BBEdit, other scriptable applications, or the Mac OS. The handler's return value is inserted into the file that included it.

Given the HTML document below:

```
<html>
<head>
    <title>Include Test</title>
    <meta name="generator" content="BBEdit 7.0">
</head>
<body>

<!-- #bbinclude "foo.script" #x#="3" #author#="JEK"-->

<!-- end bbinclude -->

</body>
</html>
```

The following script inserts three lines: the first containing the file's path, the second containing the parameter "x" passed to it in the #bbinclude directive, and the third containing the parameter "author."

```
on include(f, vars)
   set s to f as text
   set s to "File Path:  " & s & return & return as text
   set s to s & "x:  " & x of vars & return & return as text
   set s to s & "Name:  " & author of vars & return as text
   return s
end include
```

The resulting document might look like this:

```
<html>
<head>
    <title>Include Test</title>
    <meta name="generator" content="BBEdit 7.0">
</head>
<body>

<!-- #bbinclude "foo.script" #x#="3" #author#="JEK"-->
File Path:  Boot:Desktop Folder:incl_test.html

x:  3

Name:  JEK
<!-- end bbinclude -->

</body>
</html>
```

Including Perl or Python Scripts

BBEdit lets you include scripts written in most popular Unix scripting languages. If you are running Mac OS 9 and have MacPerl installed on your computer, you can write include scripts in Perl. If you are running Mac OS X, you can write include scripts in Perl, Python, or any other Unix scripting language. The complete path name of the file being processed is passed to the script as its first argument, and any variables in the include statement are passed as additional arguments. All these can be retrieved via @ARGV in your Perl script.

new in 7.0.2 You can now include scripts written in any Unix scripting language that can be run from the Shebang (#!) menu.

Any text sent to STDOUT by the script will be taken as the value of the #bbinclude operation and inserted into the HTML file. If an error occurs while running the script, the STDERR output, if any, will be inserted into the file along with the STDOUT, and a single line indicating the error will be added to the error browser.

For example, enter this directive in your HTML file:

```
<!-- #bbinclude "foo.pl" #length#="2" #width#="3" -->
<!-- end bbinclude -->
```

Then use this source code for “foo.pl”, and save it in the same folder as the HTML file, or in the “Templates and Includes” folder specified in the HTML Web Sites panel of your BBEdit preferences:

```
#!/usr/bin/perl -w
my $file = shift @ARGV;
my %args = @ARGV;
my $area = $args{"length"} * $args{"width"};
print "Filename: $file\n";
print "Area: $area\n";
```

When you run the Update command, BBEdit will place the file name in the script's variable $file and the "length" and "width" variables in the associative array (hash) %args.

After the update, the BBEdit file will look like this:

```
<!-- #bbinclude "foo.pl" #length#="2" #width#="3" -->
Filename: Mac HD:Desktop Folder:sample.html
Area: 6
<!-- end bbinclude -->
```

In addition, BBEdit will pass information about the current HTML Tools settings to the script in the following environment variables:

```
BBEditServerURL
BBEditServerPath
BBEditDefaultFileName
BBEditTemplateDirectory
BBEditRootDirectory
BBEditLowercaseTags
BBEditLowercaseAttributes
BBEditAlwaysQuoteAttributes
```

To access these in your Perl code, use the %ENV environment variable hash. For example, this line of Perl will print the Web server name specified in your BBEdit HTML Web Site preferences:

```
print $ENV{BBEditServerURL};
```

Here's an example Python include script.

```
#!/usr/local/bin/python
import os
import string
import sys

print "Hello Python World!"
print "==================="
print "File being updated: ", sys.argv[1]
print

userVariables = {}
for i in range(2, len(sys.argv), 2):
   userVariables[sys.argv[i]] = sys.argv[i+1];

print
print "Dumping the user variables passed to the script"
print "==============================================="
print
keys = userVariables.keys();
keys.sort()
for k in keys:
   print "%-30s %s" % (k, userVariables[k])

print
print "Dumping the environment variables set by BBEdit"
print "==============================================="
print
for k, v in os.environ.items():
   if (string.find(k, 'BBEdit') == 0):
      print "%-30s %s" % (k, os.environ[k])
```

Other Include Notes

IMPORTANT Older versions of BBEdit supported the use of "#include" as an alternative to "#bbinclude". However, this syntax made it difficult to mix BBEdit includes and Microsoft Active Server Page (ASP) directives, so it is no longer supported. If you have existing documents which use the older syntax, simply change "#include" to "#bbinclude" to use them with BBEdit 7.0.

APPENDIX

D

Changes Since 7.0

This appendix summarizes the major changes that have been made in BBEdit 7.0 since its initial release. As of this writing, the current version is 7.0.4.

In this appendix

BBEdit 7.0.4 . . . . . **317**
Close Current Tag – 317
BBEdit 7.0.3 . . . . . **318**
Link File's Encoding to HTML/XHTML Character Set – 318
BBEdit 7.0.2 . . . . . **318**
Expanded Character Set Handling – 318
Application Packaging Changes – 319 • *Mac OS 9.1 Support* – 319
Insert Multiple Files – 319 • *Save a Copy* – 319
New Menu Key Combinations – 319 • *CVS Export Project* – 319
Unix Script Support for Include Files – 319
BBEdit 7.0.1 . . . . . **320**

BBEdit 7.0.4

BBEdit 7.0.4 is a maintenance update, released in July 2003 to correct various minor issues reported with previous releases. It also includes a preferences option to control how the Close Current Tag command functions.

Close Current Tag

This option in the HTML Markup Preferences panel allows you to control how the Close Current Tag command inserts the appropriate closing tag.

- "Context Sensitive" places the closing tag according to various contextual clues, such as whether the opening tag is a block element or an inline element, and whether there are line breaks in a block element's contents (if the tag is a block element). This is the factory default, and is consistent with previous versions of BBEdit (with some improvements to the context sensitivity).
- "Before Insertion Point" always places the closing tag immediately before the insertion point, thus leaving the insertion point outside of the tag container.
- "After Insertion Point" always places the closing tag immediately after the insertion point. This leaves the insertion point inside the tag container.

BBEdit 7.0.3

BBEdit 7.0.3 is a maintenance update, released in March 2003 to resolve issues reported with previous releases. It also incorporates an additional HTML placeholder, #SHORTUSERNAME#, as well as a preference option to control character set handling in HTML and XHTML documents.

Link File's Encoding to HTML/XHTML Character Set

When this option in the Text Files: Opening Preferences panel is selected, BBEdit will use the character set specified in the appropriate HTML meta tag or XML declaration to determine a file's encoding when opening the file. Also, when this option is on, changing an HTML or XML document's character set with the Character Set markup command will adjust the file's encoding to match (as indicated on the Encoding submenu of the File Options popup in the status bar), and changing the file's encoding will adjust the character set declaration (if one exists). This option is on by default.

When this option is off, then BBEdit does not attempt to use the character set specified in the HTML meta tag or XML declaration, but will follow the usual procedure for determining the file's character set. (See "Choosing the Encoding for a Document" on page 27.) The only reason you might want to turn this option off is if you routinely put characters into your document that cannot be represented in the declared character set, e.g. if you will be post-processing the file by some other means which modifies these characters.

BBEdit 7.0.2

BBEdit 7.0.2 is a maintenance update, released in February 2003 to resolve issues reported with previous releases, and to provide several important new features and feature enhancements as described below.

Expanded Character Set Handling

When opening documents, BBEdit will automatically recognize and appropriately handle files that use character set encodings other than Mac Roman, even multi-byte character sets. Likewise, you can now save documents using your choice of character set encodings.

For details on opening files with various character set encodings, see "Choosing the Encoding for a Document" on page 27, and for information on saving files, see "Setting the Encoding" on page 25.

For additional details on BBEdit's handling of character sets in multi-byte and Unicode files, see Chapter 5.

Application Packaging Changes

Beginning with this release, the factory-supplied plug-ins and spelling dictionaries are now part of BBEdit's application package. This means that factory plug-ins and spelling dictionaries remain available when the application is launched without a "BBEdit Support" folder.

In addition, keyboard equivalents for plug-ins are no longer tracked using the plug-in file as a mechanism. Thus, future updates to plug-ins will no longer require that you re-apply any customized key equivalents for plug-ins. (For this release, you will need to do so one last time.)

For more details on these changes, please refer to the appropriate sections of Chapter 2.

Mac OS 9.1 Support

BBEdit 7.0.2 is now qualified to run on Mac OS 9.1 and later versions, with CarbonLib 1.5 or later required. (Please note that use of Mac OS 9.2.2 remains recommended; see the "System Requirements" on page 9 for further details.)

Insert Multiple Files

The Insert File Contents command now supports selecting multiple files to be inserted into the current document. (See "The Insert Submenu" on page 71 for complete details.)

Save a Copy

The new Save a Copy command allows you to save a copy of the current document out to a file at any time, while you continue to work with the original file. (See "Saving a Copy of a File" on page 23 for more details.)

New Menu Key Combinations

The Help, Home, End, Page Up and Page Down keys can now be used in menu key combinations as well. The Help key can be assigned without modifiers; the others must be used in combination with at least either the Command or Control key. (See "Available Key Combinations" on page 290 for details on setting menu keys.)

CVS Export Project

The new Export Project command allows you to create a copy of any CVS project at the selected location. (See "Export Project" on page 267 for additional details.)

Unix Script Support for Include Files

You can now use scripts written in any Unix scripting language that can be run from the Shebang (#!) menu with BBEdit's include file mechanism. (Appendix C covers the use of include files.)

BBEdit 7.0.1

BBEdit 7.0.1 was a maintenance update, released in November 2002 to resolve issues reported with the initial 7.0 release. This update did not incorporate any additional features. For details on other changes made, please refer to the archived BBEdit release notes on our web site.

`http://www.barebones.com/support/bbedit/archived_notes.shtml`

Index

A

A (anchor) tag 206
ABBR tag 209
Absoft Fortran 182
active windows 46
ActiveX controls 207
Add & Compile command 268
Add command 268
Add/Remove Line Numbers plug-in 281
ADDRESS tag 202
alternation 125
Anchor command 206
AppleScript 14, 20
    and searching 104
    attaching scripts to menu items 248
    in HTML documents 221, 313
    pitfalls 240
    reading dictionary 236
    recording 234
    scripts menu 247
    updating to BBEdit 6 241
APPLET tag 207
Application Preferences 153
Application Services 153
Apply to New command 114
Apply to Old command 114
AREA tag 208
Arrange command 91
arranging windows 91
arrow keys 304
ASCII conversion 281
ASCII table 88
attaching scripts to menu items 248
Auto-Complete Glossary command 225
auto-indent 57
automatic backups 39

B

B (bold) tag 210
backgrounds
    in HTML documents 200
backups 38
    automatic 39
    manual 39
backward searching 98
Balance Tags command 212
balancing parentheses 57, 60
BASE tag 190, 200
BASEFONT tag 208
#basename# placeholder 226
batch find 98, 100
"bbedit" command-line tool 31, 256
BBEdit Glossary folder 12
BBEdit Scripts folder 14
BBEdit Startup Items folder 12
BBEdit state information 24
BBEdit-Talk mailing list 116
BDO tag 209
bi-directional override 209
BIG tag 210
Block Elements submenu 201
BLOCKQUOTE tag 202
BODY tag 200
bookmarks 32
BR tag 208
breakpoints 268
Bring Up To Date command 268
broken links 212
Browser Display Preferences 154
browser plug-ins 207
browsers 145
    differences 74
    disk browser 146
    errors 253
    file list panel 148
    search results 101, 149
    splitter 146
    status bar 146, 147
    text panel 146, 148
BUTTON tag 205

C

C programming language 64
Cancel button 4
Cancel Check-Out command 272
capitalize
    lines 62
    sentences 61
    words 61
CAPTION tag 204
Cascading Style Sheets 196
case sensitivity 98
case transformations 129
CENTER tag 202
changing case 61
character classes 120
character set encoding 25, 27, 85, 176, 178, 318

Check In command 270
Check In Folder 274
Check Out command 271
Check Out Folder command 275
Check Spelling command 76
Check submenu 211
Check Syntax command 267
checking links 212
checking spelling 76
    external spell checker 79
    user dictionary 78
CITE tag 209
Clear command 4, 46
Clear key 46
clearing a marker 70
client-pull 201
client-side image maps 208
client-side scripts 201, 202, 208
Clipboard 47
clipboard 47
#clipboard# placeholder 226
clipboards, multiple 47
Close Current Tag command 195
CODE tag 209
CodeWarrior 267
COL tag 204
COLGROUP tag 204
colored text 59
    in HTML documents 200
Columnize plug-in (obsolete) 286
Command and Option keys
    in document windows 53
Command key 5
command keys
    assigning to menu items 289
    in dialogs 4, 188
    in menus 3
    listing by default key 298
    listing by menu 291
    shortcuts 303
Command-Period 4
comments
    removing 215
Compare Again command 114
Compare Revisions command 273
comparing files 73
    multiple files 75
Compile command 253, 267
compile errors
    Compile Errors browser 253
complex patterns 123
Concatenate plug-in (obsolete) 286
Configure TeX Coloring plug-in 281
context-sensitive HTML 193, 194
control characters 64
Convert to ASCII plug-in 281
Convert to Client Side Map command 208
Convert to Table command 204
Copy & Append command 47
Copy command 4, 47
creating documents 21
    from templates 221
    HTML documents 21, 189
    with clipboard 21
    with selection 21
creator 24
CSS 196
    @import 196
    format 196
cursor movement 51
    using arrow keys 52
cursor position 48, 58
custom markup 221
Cut & Append command 47
cut and paste 46
Cut command 4, 46
Cut/Copy/Clear Lines Containing 286

D

#date# placeholder 226
DD tag 203
defined term 210
definition list 203
DEL tag 202, 209
Delete key 46, 54, 304
deleted text 202
deleting text 46
Detab command 65
development environments 251
    configuring BBEdit for use with 252
    source and header files 253
DFN tag 210
dialog keyboard shortcuts 4, 188
dictionary, AppleScript 236
Differences command 74
Differences Preferences 155
directory list (HTML) 203
Disassemble command 268
disk browsers 14, 20, 21, 26, 146
    file list panel 148
    status bar 147
    text panel 148
DIV (division) tag 202
DOCTYPE 190
documents
    comparing 73
    creating 21
    double-clicking 24
    editing text 46
    icon 50

inserting text 71
modification indicator 49
on FTP servers 32
revealing in Finder 92
saving 21, 22
window anatomy 48
DOS line breaks 24
double-clicking 24, 26
drag-and-drop
in document windows 48
to BBEdit application icon 24, 26
to Windows floating window 26
with HTML Tools 217
Dreamweaver 215
DT tag 203
dynamic menus 3

E

Edit Tag command 194
Edit Task Comment command 272
editing text 46
shortcuts 303
Editor Defaults Preferences 155
Educate Quotes plug-in 282
EM tag 210
Emacs Key Bindings 175, 305
encoding 25, 27, 85, 176, 178, 318
End key 56
Entab command 64
Enter key 4
Enter Search String command 112
error browser 253
escape codes 64, 117
Escape key 4
Exchange with Next command 93
exclude matches 100
expanding tabs 57
extending the selection 53, 55
extensions
see plug-ins
external spell checker 79

F

F keys 55
Favorites 17, 103
FIELDSET tag 205
file filters 107
File Filters Preferences 157
file groups 21, 36
file list panel 148
#file# placeholder 226
File Search Preferences 157
File Types Preferences 159
#file_extension# placeholder 226
File-pop-up menu 49
Filters 261
filters, file 107
Find & Mark All command 71
Find & Mark command 49
Find & Replace All Matches 102, 110
Find & Replace All Matches command 113
Find Again command 97, 112
Find All 97, 101
Find command 95, 112
Find Definition command 114
Find dialog 96
Find Differences command 114
Find in Next File command 102, 113
Find in Reference command 114
Find Selection command 112
finding text
see searching
floating windows
ASCII table 88
Glossary 223
HTML Entities 219
HTML Tools 188, 216, 218
Web Safe Colors 219
window list 89
font
for printing 41
FONT tag 208
Fonts menu 60
foreign text 81
form sentences 62
FORM tag 204, 205
form words 62
Format command 214
Forms submenu 204
Forward Delete key 54, 56
fractional widths 41
FRAME tag 211
Frames submenu 211
FRAMESET tag 211
freezing line endings 66
Frontier 221
FTP 32
alternate ports 32
FTP Browsers 35
FTP Settings Preferences 160
function keys 55
#function# placeholder 226
Function pop-up menu 49, 50
Function Popup Preferences 161

G

Get Info command 50, 92
Get Revision command 272
Glossary 12, 88, 223

language sensitivity 224
manually sorting 224
substitutions 226
Glossary palette 4, 289
Glossary Preferences 161
Go To Center Line command 113
Go To Line command 55, 113
Go To Previous Error command 113
gremlins 63
grep 98
alternation 125
backreferences 133
character classes 120
comments 137
complex patterns 123
conditional subpatterns 141
entire matched pattern 128
escape codes 117, 121
examples 130
excluding characters 120
longest match issue 126
lookahead assertions 139
lookbehind assertions 139
marking a mail digest 132
marking structured text 131
matching delimited strings 131
matching nulls 133
matching white space 130
matching words and identifiers 130
non-capturing parentheses 135
non-printing characters 121
non-repeating subpatterns 142
once-only subpatterns 142
pattern modifiers 137
positional assertions 139
POSIX character classes 135
quantifiers 122
ranges 120
rearranging name lists 132
recursive patterns 144
repetition 122
replacement patterns 127
replacing with subpatterns 128
setting markers with 71
subpatterns 124, 127
wildcards 118

H

Hard Wrap command 66, 67
hard wrapping 62, 63, 65, 67
Head Elements submenu 200
header files 253
headers 42
heading tags 202
Hex Dump plug-in 282
hex escapes 99, 121
hexadecimal 64
hidden files
on FTP servers 33
highlighting of text 46
hollow diamond 49
Home key 56
HR tag 202
HTML
books on 186
CSS 196
document title 190
Web sites about 186
HTML Colors Preferences 162
HTML document 21
HTML Entities palette 219
HTML Markup Preferences 163
HTML Palette Preferences 164
HTML Preview Preferences 164
HTML Templates folder 220
HTML Tools 185–221
Block Elements 201
checking HTML 211
colors 219
custom markup 221
Edit Tag 194
entities 219
forms 204
frames 211
Head Elements 200
include files 311
indexing 216
inline elements 206
lists 203
Markup menu 188
miscellaneous 215
new document 189
optimizing documents 215
palette 188, 216, 218
phrase elements 209
preferences 187
reformatting documents 214
scripting 221
scripts 313
tables 203
Tag Maker 193, 194
templates 220
tool descriptions 192
translation 215, 220
updating documents 212
utilities 214
variables 312
HTML Tools Preferences 165
HTML Web Site Preferences 166
human interface 3

I

I (italic) tag 210
image maps 208
IMG tag 206
include files 311
    variables 312
    see also templates
#indent# placeholder 226
indenting 62
indexing HTML documents 216
Info button 50
Inline Elements submenu 206
#inline# placeholder 226
INPUT tag 205
INS tag 202, 210
Insert Glossary Entry command 225
Insert pop-up menu 50
inserted text 202
inserting files 71, 72
inserting folder listings 72
inserting page breaks 72
inserting project listings 72
inserting text 71
inserting Toolbox calls 72
#insertion# placeholder 226
insertion point 46
installing BBEdit 9
international text 25, 27, 81, 85, 176, 178, 318
Internet Helpers (globe) menu 65
invisible characters 58
invisible files 29
    on FTP servers 33
Invisible Folders 106

J

Java applets 207
JavaScript 201, 202, 208

K

KBD tag 210
key icon 50
keyboard shortcuts 280, 290, 303
    in dialogs 4, 188

L

LABEL tag 205
language, source code 58
Languages Preferences 168
language-sensitive glossary 224
launching BBEdit 19
LEGEND tag 205
LI tag 203
line breaks 24, 62
line feeds 63
line numbers 48
    on printouts 42
link checker 212
LINK tag 191, 200
list items (HTML) 203
Lists submenu 203
longest match issue 126
lower case 61

M

Machine Info plug-in (obsolete) 286
Macintosh Drag and Drop 48
    see also drag-and-drop
Macintosh line breaks 24
MacPerl 256
Macromedia Dreamweaver 215
Make Prototypes plug-in (obsolete) 286
MAP tag 208
Mark pop-up menu 49, 69
markers
    clearing 70
    setting 70
Markup menu 188
menu list (HTML) 203
menus 3
META tags 190, 191, 201
Misc submenu 215
monospaced font 203, 210
mouse shortcuts 303
moving text 46
moving the cursor 51
    using the arrow keys 52
MPW
    state information 24
multi-byte text 25, 27, 81, 85, 176, 178, 318
multi-file comparisons 75
multi-file search 98, 99
multiple clipboards 47
multiple Undo 48

N

#name# placeholder 226
New Project command 273
NOFRAMES tag 211
Non-Greedy Quantifiers 126
non-printing characters 58, 99
NOSCRIPT tag 201, 202
numeric keypad 54

O

OBJECT tag 207
OL tag 203
Open command 24, 26

options 29
Open File by Name command 31
Open Hidden 29
Open Recent command 26, 29
Open Selection command 26, 30
Opening 26
Opening Existing Documents 26
optimizing HTML 215
OPTION tag 206
OPTIONGROUP tag 206
ordered lists 203
outdenting 62

P

P (paragraph) tag 201
page breaks 72
Page Down key 56
Page Up key 56
paragraph (definition) 46
Paragraph Fill option 68
PARAM tag 207
passive FTP 33
Paste command 4, 47
Paste Previous Clipboard 306
Paste Previous Clipboard command 47
Path pop-up menu 50
pattern matching
see grep
pencil icon 49
Perl 256
Perl scripts 256
Perl/Unix Filters palette 4, 289
Perl/Unix Scripts palette 4, 289
persistent includes 311
Philip Bar 57, 58
Phrase Elements submenu 209
placeholders 307
#RELATIVE# 310
AppleScript 227
in glossaries 226
Plug-In Info command 279
Plug-In Tools palette 4, 289
plug-ins 279
POSIX-Style Character Classes 135
PRE tag 203
Precompile command 268
Preferences 152
Application 153
Browser Display 154
Differences 155
Editor 54, 253
Editor Defaults 155
File Filters 157
File Search 157
File Types 24, 159
FTP Settings 160
Function Popup 161, 253
Glossary 161
HTML Colors 162
HTML Markup 163
HTML Palette 164
HTML Preview 164
HTML Tools 165
HTML Web Site 166
Languages 168
Printing 40
Spelling 169
Startup 170
State 171
Status Bar 172
Text Colors 174
Text Editing 174
Text Encodings 176
Text Files
Opening 177
Saving 179
Text Printing 179
Text Search 181
Tools 182
Windows 58, 183
Prefix/Suffix Lines plug-in 282
preformatted text 203
Preprocess command 268
Print One Copy command 40
printing 40
Printing Options command 42
Process Lines Containing plug-in 284
Project Builder 182, 269
Projector 269
Projector button 50
pull-down menus 3
Python scripts 256

Q

QUOTATION tag 209

R

recording scripts 234
rectangular selection 52
Redo command 48
reflowing paragraphs 67
reformatting HTML 214
regular expressions
see grep
#RELATIVE# placeholder 310
Remove Line Breaks command 66
removing comments 215
repetition metacharacters 122
Replace 97

Replace & Find Again command 97, 102, 113
Replace All 97, 101, 102, 110, 113
Replace command 112
replacing text 46
see also searching
Return key 4
Reveal in Finder command 92
Reverse Lines plug-in 286
Revision History command 273
Rewrap Quoted Text 62
Rez 64
rubber stamp 43

S

SAMP tag 210
Save a Copy command 23, 319
Save a Copy to FTP Server command 34
Save As command 22
Save As options
file creator 24
line breaks 24
Options button 23
Save As Stationery 23
state information 24
Save command 22
Save Selection command 23
Save to FTP Server command 34
#script# placeholder 226, 227
script systems 81
SCRIPT tag 201, 208
Scripts 262
updating from old versions 241
Scripts menu 14
Scripts palette 4, 14, 289
scrolling, synchronized 93
search results window 101, 149
searching 96
all open documents 104
backward 98, 111
batch find 98
case sensitive 98, 111
exclude matches 100
extending selection 98
for non-printing characters 99
for whole words 98
grep 98
see also grep
in a folder 103
in multiple files 99
in results of a previous search 105
in selection only 98
menu reference 112
multiple files 98
non-printing characters 121
on a Web site 106
replacing in multiple files 109
results window 101, 149
search set 103
with a script 104
with scripts 104
wrap around 98
Select All command 4, 46
Select Line command 46
Select Paragraph command 46
#select# placeholder 226
SELECT tag 205
selected text 46
selecting text 46, 51
by clicking 51
extending the selection 53
rectangular selection 52
#selend# placeholder 227
#selstart# placeholder 227
Send PostScript plug-in (obsolete) 286
Send to Back command 93
Set Breakpoint command 268
Set Marker command 49, 70
Set Menu Keys command 3, 4, 289
Set Target command 267
setting markers 70
using grep 71
SGML 187
prologue 190
Shebang Menu 259
Shell scripts 256
shell worksheets 254
Shift-Delete keystroke 54
shifting text 62
Show Invisibles command 49
Show pop-up menu 147
simple includes 311
SMALL tag 210
Smart Editing 57, 157
smart quotes 57
Soft Wrap Text command 49
soft wrapping 57, 65, 66
as default 66
solid diamond 49
Sort Lines plug-in 285
source files 253
source management 269
SPAN tag 209
special folders 11
spell checking 76
external spell checker 79
user dictionary 78
Spelling Preferences 169
split bar 51
in browsers 146
startup items 20

Startup Preferences 170
state 24
State Preferences 171
stationery 23, 91
Stationery List 91
status bar 48
    hiding 50, 58
    in browsers 146
    in disk browsers 147
Status Bar Preferences 172
STRIKE tag 210
STRONG tag 210
STYLE tag 201
stylesheets 201
SUB (subscript) tag 209
subpatterns 124
substitution
    in glossaries 226
SUP (superscript) tag 209
Super Get Info button 50
Synchro Scrolling command 93
syntax checking 212
syntax coloring 59

T

TABLE tag 203
Tables submenu 203
tabs
    converting to and from spaces 64
Tag Maker command 193, 194
TBODY tag 204
TD tag 204
templates
    for HTML documents 191, 220
    scripts 313
    variables 312
Text Colors Preferences 174
Text Editing Preferences 174
Text Encodings Preferences 176
Text Files
    Saving Preferences 179
Text Files Opening Preferences 177
text highlighting 46
Text Options pop-up menu 49
text panel 148
Text Printing Preferences 179
Text Search Preferences 181
text transformation 60
text wrapping 65
TEXTAREA tag 206
TFOOT tag 204
TH tag 204
THEAD tag 204
THINK Reference 72
#time# placeholder 227
time stamps 43
Toolbox Call Template command 72
Tools Preferences 182
TR tag 203
transformations, case 129
Translate Line Breaks 177
translation 281
    HTML 215, 220
TT tag 210
two-up printing 42
typing text 46
typographer's quotes 282

U

U (underline) tag 210
UL tag 203
Un/Comment plug-in 286
Undo command 48
Unicode 25, 27, 81, 85, 176, 178, 318
universal-argument 306
Unix line breaks 24
Unix shell scripts 256
unordered lists 203
Update submenu 212
upgrading to BBEdit 7 11
upper case 61
user interface 3
UTF-8 25, 85
Utilities submenu 214

V

validation 211, 212
VAR tag 210
variables 312
VisiBone 219
VOODOO Shim plug-in 286

W

watermark 43
Web Safe Colors palette 219
Web Site Settings dialog 167
wildcards 118
window list 89
windows
    arranging 91
    exchanging with next 93
    Info button 92
    sending to back 93
    split bar 51
    status bar 48
Windows floating window 26
Windows menu 87
Windows Preferences 183
worksheets, shell 254

wrap around 98
Wrap while Typing option 66
wrapping text 57, 65

X

XML declaration 189

Y

yank-pop 306

Z

Zap Gremlins command 63